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Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

March 6, 1961

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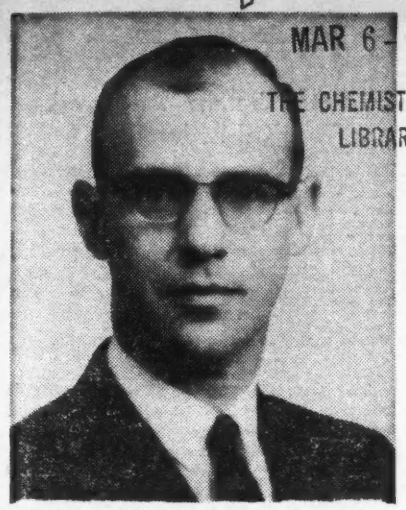

CARWIN SALES MANAGER: R. Bruce Baptie, appointed sales manager of the Carwin Company, North Haven, Conn.

FDA Shuts Eyes to Violations As Food Additives Extension Bill Grinds Way Through Congress

Chemical manufacturers offering food additives for sale that have not been cleared as "safe" by the Food & Drug Administration are violating the food additives law as of today (March 6). The time for getting products cleared with the agency expired last night at midnight—but don't push the panic button. Nobody is going to jail, or will be fined, or even have their products seized. FDA is turning its back on the situation while congress decides how much more time to give industry to test out its products and get them okayed by the agency.

FDA Commissioner George P. Larrick quietly put out the fire that was building up to an impossible situation as the March 6 deadline for meeting the laws requirements approached when he told the house commerce committee last week that he intends to employ the "rule of reason" in enforcing the food additives law beyond todays deadline date.

HR 3980 Is Reported Out

The house commerce committee late last week reported HR 3980 for passage with two changes: It broadened the bill to cover applications pending for extensions and it authorized the Food & Drug Administration to grant extensions only through June 30, 1964.

Mr. Larrick said that while it is his duty to enforce the law as written by congress, he does not feel obligated to act in this instance since legislation that would extend the deadline for meeting the additives law is moving through congress. He had reference to the administration's bill (HR 3980) to give the FDA authority to delay the effective date of the law to such time as may be needed for producers to complete test work on additives.

Hearings on the legislation developed the fact that everybody is in favor of extending the effective date, but there is a wide disagreement over whether the ex-

—Continued on page 56

GENERAL SALES MANAGER: Gordon E. Cole, named general sales manager of Air Reduction Chemical & Carbide Company, New York, in which post he will be responsible for sales of its organic chemicals and Colton polymer departments.

Additive Poser: After HR 3980, What Happens?

What's going to happen to the 3,000 or more food additives still undergoing safety tests now that the time extensions that were granted by the Food & Drug Administration have run out?

FDA says it is not going to issue any blanket extensions with the new authority being given it in HR 3980 by congress.

How then can a manufacturer protect his interests and be assured that his product—in technical violation of the law—is not removed from the market?

This question has been bugging chemical additives producers and others ever since it became apparent that safety tests on food additives under suspension couldn't be completed before the law's day of reckoning arrived.

The answer is that manufacturers had better take the initiative and apply promptly to FDA for a further extension. That's the way FDA plans to handle the situation.

Larrick States FDA Position

This advice comes from FDA Commissioner George P. Larrick, who was asked more or less this same question during hearings last week by the house commerce committee on HR 3980, the measure which gives the agency authority to issue new extensions under the food additives law. This was Commissioner Larrick's reply:

"If HR 3980 is enacted, we will advise the affected industries that we are ready to consider requests they wish to make for further extensions of the effective date of the law; we will also advise them that for a reasonable period of time to permit evaluation of their requests, the existing extensions will not be cancelled."

He added that he thought a couple of months would be a reasonable time within which to handle additional requests for extension.

Mr. Larrick emphasized that he has no intention of taking advantage of difficult situations in which manufacturers may find themselves and intends to administer the law effectively, but with as little hardship on the industry as possible. He will apply the rule of reason in its enforcement and exercise "administrative discretion" when this is called for.

The question whether the law allows him to use "administrative discretion" in its enforcement was discussed at some length during the hearings.

Industry representatives and members of the committee raised questions as to

—Continued on page 48

Styrene Price Takes A Nosedive to Bottom

Styrene monomer prices dropped last week to a new low. Koppers Company cut rubber-grade styrene to 11 cents a pound, tankcars, f.o.b. works, freight equalized, and Monsanto Chemical Company reduced polymer (plastic) grade to 13 cents, same basis.

Dow Chemical Company, currently the world's largest producer of styrene, indicated late last week that it would go along with the move. Others in the styrene industry were expected to follow swiftly.

Koppers' move, to 11 cents from the old price of 12.59 cents, also involved a change in shipping terms: Whereas the old price had been on a freight allowed basis, the new one will be f.o.b., freight equalized with the nearest competitive producing plant.

Further, Koppers established a change in the escalation clause in its new rubber-grade price schedule, based chiefly on the price of benzene. As long as the price of benzene stays within the range of 31-34 cents a gallon, the 11-cent-a-pound monomer price will prevail. Quotations will be adjusted upward should benzene go above 34 cents, and down if benzene goes below 31 cents.

The escalation clause applies to rubber-grade styrene monomer in tankcar quantities only, and to no other quantity of either rubber or polymer grade.

Plastic-grade styrene, now priced at 13 cents a pound, tankcars, f.o.b. works, freight equalized with the nearest competitive producing point, was formerly quoted at 14½ cents a pound, tankcars, freight allowed.

Drum prices for rubber grade monomer are now 15 cents a pound, carlots, delivered, and 17 cents a pound, less carlots, same basis. Quotes for polymer grade now

—Continued on page 54

Maleic Anhydride Facility On Stream at Neville Island

Pittsburgh Chemical Company has just started up its new 20-million-pound-a-year maleic anhydride facility at Neville Island, Pa.

The company, a division of Pittsburgh Coke & Chemical Company, reports that the plant, operated by the industrial chemical division, is using benzene from the parent company's cokeovens as raw material.

The new plant's product is available in molten form in tankcars and trucks or briquettes packaged in twenty-five-pound drums or in fifty-pound bags.

Liquors from the unit will be used to increase production of Pittsburgh Chemical's fumaric acid plant operation at Neville Island, the company reports.

Food Additives Processing: Here Is the Score to Date

Today (March 6) marks a milestone in the administration of the food additives law.

This is the day when all additives are required to meet the safety requirements of the law or be removed from the market.

That won't come to pass, however, because congress is pushing legislation through to extend the effective date.

But during the two and one-half years since the law was signed on September 6, 1958, this is what has been accomplished by the Food & Drug Administration in the way of enforcement:

- It has published lists of 718 chemicals, used with food, which are generally recognized as safe and thus are exempt from application of the law.
- It has published lists of 112 substances that have prior sanction and thus are exempt.
- It has received 391 petitions for food additive regulations involving over 1,900

—Continued on page 53

Fertilizer Expansions Follow Popular Route

Expansion of fertilizer operations via acquisition—that continues as the popular route. Latest to tread it are John Deere Chemical Company, a subsidiary of Deere & Co., and Summers Fertilizer Company.

Deere last week purchased for an undisclosed cash sum the mixed fertilizer business of Ozark-Mahoning Company. Under terms of the sale, Deere acquires Ozark's phosphoric acid-ammonium phosphate plants located near Tulsa, Okla.

Ozark will continue to own and operate its sulfuric acid plant at that location and its mining operations in other parts of the country.

Until now, Deere's only plant in the

—Continued on page 36

Polyester Resin Facility Has Its Capacity Doubled

Molded Fiber Glass Companies has completed a program to double capacity of its polyester resin plant at Ashtabula, Ohio. The plant addition has been designed for the efficient production of isophthalic-based resins with resultant optimum resin stability and improved color.

The newly-completed facilities raise output to 10 million pounds a year. Total production of the plant will go to the five affiliated MFG manufacturing companies.

Chemico Urea Process Passes Its First Big Test

Chemical Construction Corporation, New York, reports that the first successful commercial scale operation of a new, "lower-cost, more efficient" process for production of urea is under way at Lawrence, Kan.

The plant, designed and built for Cooperative Farm Chemicals Association, has been in continuous operation there since January 1, the construction company reports.

Chemico, reportedly the only US firm with its own urea process, says that its urea plants under construction or already in production, account for 400,000 tons of urea per year — or 24 percent of the world's present production capacity.

Allied Is On Stream At Phosphoric Plant

Allied Chemical Corporation has started up a new 50,000-ton-a-year phosphoric acid plant at the East St. Louis, Ill., works of its General Chemical Division.

The plant will primarily serve fertilizer manufacturers in the midwest. Its product, Allied says, "will be a truly green wet-process acid of finer quality than any previously available."

The higher quality is said to stem from the use of new processing technics "together with selected raw materials, including virgin quality sulfuric acid."

ICI Plants a Giant Foot on the European Continent

Britain's giant Imperial Chemical Industries, Ltd.—with three new plants in the works at home—is moving on to the European continent with a massive petrochemical venture: a ten-year, $280 million project near Rotterdam, the Netherlands.

Construction will begin early next year, upon successful completion of negotiations for the 300-acre site, ICI says. The Rotterdam installation will produce basic petrochemicals, plastics and related materials.

Meanwhile, here's what ICI has afoot in the United Kingdom:

- **Near Blackpool, it is putting up a new polyvinyl chloride facility. The 40 percent expansion, which will raise PVC capacity from about 70,000-80,000 metric tons to around 115,000 tons annually by 1963, is attributed by ICI to continued heavy demand for unsupported calendered sheet and cable.**
- **At Billingham, ICI is erecting a general-purpose pilot plant to service its heavy organic chemicals division.**
- **At Macclesfield, the company will consolidate its drug compounding and packaging in a new $28 million installation. The project is slated for completion in 1966.**

As to its Dutch venture, ICI notes that the Rotterdam plant "as well as units elsewhere in the European Economic Community" reflect its intention of pursuing chemical sales in western Europe vigorously.

Detailed plans for the move into Europe were started last summer when ICI set up a European Council to review its position and make recommendations.

Europe has always been an important market for ICI, the company points out, adding that establishment of the Rotterdam complex doesn't imply relaxation

—Continued on page 54

P. A.'s Call Business Listless But See a U-Turn to the Better

This report was prepared by the business survey committee of the National Association of Purchasing Agents.

Business continues listless. Curtailed auto production, the profit squeeze and the weather are cited as reasons for lack of zip in the economy. Few see any real change before late spring. However, the bottoming-out process noted in last month's report continues, indicating that we may be in a broad U-turn to the better. New orders and production figures are bright spots in the February report: 25 percent of those reporting show an increase in new orders, up from 17 percent in December; 29 percent report a decline, compared to 34 percent in January and December.

Purchasing executives continue to be very cautious in their buying policy, with only a few willing to lengthen forward commitments, close inventory control being the order of the day. Unemployment remains a major problem. However, a cautious wait-and-see optimism is mentioned in the general comments of many of the reports.

Production Improvement Cited

In production, 24 percent tell of improvement, up from 20 percent in January and only 15 percent in December. Those who say their companies' production has declined, have dropped from 33 percent to 29 percent.

New Orders	*Better*	*Same*	*Worse*
February	25	46	29
January	24	42	34
Production			
February	24	47	29
January	20	47	33

The special question for February queried members on anticipated 1961 inventories in relation to consumption and in comparison to their 1960 ratios. The results left no doubt that narrow inventory levels will be with us for sometime; 48 percent said they will maintain the same inventory ratios during 1961, 47 percent indicated their intention to carry less stocks. Tighter controls through EDP and an increasing awareness of the cost of possession were given as reasons.

Prices continue to drift at about the same levels as last month, with a solid 80 percent reporting no change. Very slight

—Continued on page 61

Plastics Manufacturers: Set Your Sights High

A plastics production target of 15 billion pounds for 1970 may prove to be conservative, the nation's chemical engineers have been told.

Citing the success of plastic building materials, Raymond B. Seymour, of Sul Ross State College, Alpine, Tex., told the American Institute of Chemical Engineers last week that "growth of this magnitude to a large extent is dependent on displacement of conventional materials."

Cost is not the deciding factor, he said, for "no growth would be possible if these products were not functionally superior to rival materials."

Anhydrous Ammonia: Texaco Adds Capacity

Anhydrous ammonia capacity has been expanded by forty tons a day at the Lockport, Ill., ammonia plant of Texaco, Inc. Newly-installed facilities, including a new group of compressors, has raised capacity from the original design potential of 180 tons to 220 tons per operating day.

In addition to new equipment, the company has modified existing facilities to improve operating efficiency, according to M. F. Granville, vice-president in charge of Texaco's petrochemical department.

The new facilities will be in full operation prior to the peak of the 1961 fertilizer season, enabling Texaco to increase its service to customers in the middle west.

Sodium Nitrite Prices Slated for Hike April 1

Sodium nitrite prices will be advanced April 1 on spot and contract by Solvay Process Division of Allied Chemical Corporation, New York. New carlot and truckload price will be $9.15 per hundred pounds for hundred-pound bags and $9.40 per hundredweight for 400-pound fiber drums, f.o.b. works, freight equalized.

Less-carlot prices, f.o.b. works, will carry a $2-per-hundredweight premium. This is the first increase in sodium nitrite prices since October, 1957.

Food Machinery Slashes Prices on Its Epoxy Line

To put its "Oxiron" epoxy resins on a competitive footing with epichlorohydrin-based epoxies, Food Machinery & Chemical Corporation has slashed prices on its line. "Oxirons" are described by FMC as epoxidized polyolefins.

"Oxiron 2002" is now priced at 60 cents a pound in carload quantities (drums) and at 70 cents a pound in less-carlots (more than five drums).

Schedule for "Oxiron 2001" is 80 cents and 85 cents a pound, respectively, while "Oxiron 2000" is priced at 65 cents and 75 cents a pound.

Since their introduction last year, "Oxiron" resins had been available only at developmental prices of $1.75 to $2.25 a pound.

The Week's Price Changes

Calcium Propionate, Piperazine Citrate, Styrene Advanced. Caraway Seed, Cocoa Butter, Copra, Tung Oil Reduced.

Prices Advanced

Calcium propionate, 2½c. per lb. (p. 38).
Corn oil, crude, ½c. per lb. (p. 55).
Refd., ½c. per lb. (p. 55).
Cottonseed meal, $2.50 per ton (p. 55).
Grease oil, 1c. to 1¼c. per lb. (p. 55).
Greases, ¾c. per lb. (p. 55).
Linseed meal, 50c. per ton (p. 55).
Nutmeg, East Indian, 8c. per lb. (p. 50).
Peanut meal, $2 per ton (p. 55).
Piperazine citrate, 18c. per lb. (p. 47).
Dihydrochloride, 6c. per lb. (p. 47).
Hexahydrate, 4c. per lb. (p. 47).
Phosphate, 5c. per lb. (p. 47).
Sodium propionate, 2½c. per lb. (p. 38).
Tall oil, refd., ¾c. per lb. (p. 55).
Tallow, inedible, ¾c. per lb. (p. 55).

Prices Reduced

Caraway seed, Dutch, ½c. per lb. (p. 50).
Cardamom seed, Alleppey, green, 5c. per lb. (p. 50).
Cocoa butter, ¾c. per lb. (p. 55).
Coconut oil, crude, ¾c. per lb. (p. 55).
Copra, $5 per ton (p. 55).
Ginger root, Cochin, 1c. per lb. (p. 50).
Lard, cash, 3/10c. per lb. (p. 55).
Soybean meal, 50c. per ton (p. 55).
Styrene monomer, tech. grade, 1.59c. per lb. (p.44).
Copolymer grade, 1.50c. per lb. (p. 44).
Tin metal (Straits), 1c. per lb. (p 34).
Salts, ½c. to ¾c. per lb. (p. 34).
Tung oil, ½c. per lb. (p. 55).
Vanilla beans, Bourbon, 35c. per lb. (p. 50).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Mar. 3, 1961	Feb. 24, 1961	Mar. 5, 1960
111.80	110.97	110.77

Cancer Research Push Urged

Rep. John E. Fogarty wants 1962 observed as Cancer Research Year. What the Rhode Island Congressman has in mind is an all-out cancer research push next year, which marks the twenty-fifth anniversary of the national cancer act of 1937. Mr. Fogarty put forward his suggestion last week as keynote speaker at the first all-day symposium of the Drug, Chemical & Allied Trades Association in New York. Pointing out that the '37 law "has proved to be one of the most beneficial pieces of legislation ever acted upon in the health field," he called for a five-pronged program in 1962.

Next year, Mr. Fogarty urged, a special effort should be made to:

Rep. Fogarty's Five-Point Program

- Develop unprecedented and broad-scale, long-range research programs that capitalize on clues and leads already developed that await further study in the laboratory and the clinic.
- Increase the opportunities for more young people to train for and work in cancer research.
- Provide increased support for the construction and equipment of facilities for both basic as well as clinical cancer research.
- Extend our potential for success in cancer research by extending collaborative and cooperative studies in other countries.
- Undertake a number of special activities that would dramatize the progress made in the diagnosis, prevention, treat-

—Continued on page 49

ASS'T GENERAL SALES MANAGER: Dr. I. William Lane, named assistant general sales manager of J. Howard Smith, Inc., and Marine Products Company, fishmeal producers of Port Monmouth, N.J.

Montrose Directors Okay Three-Way Merger Plan

A three-way merger of Montrose Chemical Company, Baldwin Rubber Company, and Centlivre Brewing Corporation has just been approved by directors of Montrose.

As directors of Baldwin and Centlivre have already approved the proposed merger, it is now subject to favorable tax ruling by the Internal Revenue Service and a vote by stockholders of the three concerns.

Surviving company of the consolidation

—Continued on page 60

Koppers Company Closes Two Wood-Treating Plants

Koppers Company has closed two wood-treating plants owing to a decline in demand for railroad crossties.

The Pittsburgh, Pa., company, which has thirty-three wood-treatment plants in the US, closed its Russell, Ky., plant on January 27, and its Texarkana, Tex., plant on February 15.

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Plant Expansions Increase

Casting a vote of confidence in the nation's economy, chemical makers are moving ahead on a $3.55 billion capital expansion, second highest in the industry's history.

That's the word from Manufacturing Chemists' Association in its latest annual construction survey, covering the years 1960-61 and including facilities already constructed, those under construction and those still in the planning stage.

The industry's record investment —$3.84 billion—was made in the years 1957-58.

If the MCA survey is any indication, chemical manufacturers are looking toward general organic chemicals as their big producers in the coming years.

Organics, with a total of $1.3 billion in facilities completed, under construction or planned leads all others in the latest survey breakdown.

These are followed by general inorganics with a total of $649.6 million; plastics and resins, $565.9 million; laboratory construction, $236.9 million; miscellaneous chemicals, $232.3 million; fertilizers, $225.3 million; synthetic fibers, $216.8 million; synthetic rubber, $100.3 million; and chemically processed metals, $62.2 million.

"It is significant," says MCA president John E. Hull, announcing the survey results, "that at this time when there is so much talk about a recession that chemical manufacturers are going forward with their plans to provide the necessary materials with which to build a stronger economy."

Even more significant, Mr. Hull

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Publicker May Substitute US Corn For Molasses in Its Alcohol Operation

Active consideration is being given by the Department of Agriculture to a request of Publicker Industries, Inc., Philadelphia, that it be permitted to purchase about 30 million bushels of government surplus corn at below support price for conversion into alcohol. Secretary of Agriculture Orville L. Freeman, when questioned about the purported transaction at a press conference last week, said that officials are studying both the feasibility and market implications of the proposal, adding that such an agreement would be entirely legal.

CENTRAL SOLVENTS PRESIDENT: M. A. Weppner, elected president of Central Solvents & Chemicals Company, Chicago, succeeding H. G. Simpson who has retired.

Publicker has a deal pending with the Castro government of Cuba to purchase about 120 million gallons of Cuban blackstrap molasses for about $12 million.

Cuban Deal May Be Cancelled

It is understood that this will be cancelled if arrangements can be made to purchase the corn from the US government—at a price which will enable Publicker to convert the grain into industrial alcohol in competition with alcohol from other sources.

The molasses proposal is being frowned upon by the government. President Kennedy announced publicly (OPD, 2/20/61) that he hopes the transaction will not be consummated.

The proposal of Publicker to the USDA is understood to be based upon purchasing the corn from the surplus stocks of the Commodity Credit Corporation for about

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Cyanide and Plywood: Georgia-Pacific Parlay

Georgia-Pacific Corporation, a maker of plywood, is branching into the chemical business and now it has a problem: someone to sell its products. Initially, the products are cyanide chemicals, which are being made from wood fibers in a pilot plant at Portland, Ore.

The plywood maker has a line on a good chemical merchant right now, but so far has refused to disclose the name. Discussions with the selling organization are going on at the moment and there may be some announcement about the talks in the near future.

That was the word that the New York

—Continued on page 60

Propylene Carbonate: The Piloting Is Over Now

Dow Chemical Company, after piloting propylene carbonate for several months, has just brought new commercial facilities on stream at the Freeport, Tex., site of its Texas Division.

Propylene carbonate, Dow reports, is encountering expanded usage in such applications as a natural gas purification aid, as a specialty solvent and as a chemical intermediate. In chemical properties, the material closely resembles ethylene carbonate, also produced by Dow.

Prices announced for commercial quantities are 33 cents a pound for tanks and tank transports (minimum of 4,000 gallons); 33½ cents for 55-gallon drums in carloads and truckloads; 36½ cents for less than carloads or truckloads, and 46½ cents for less than 55-gallon drums.

Propylene carbonate samples and product literature are available from Dow's technical service and development, Abbott Road Buildings, Midland, Mich.

OPD Reports From Europe

French Chemical Companies Rode On the Crest Last Year, With Sales 20 Percent Higher

Last year was a good year for the chemical people of France. Calcium carbide and petrochemicals were their stars. Calcium carbide may be waning a little at the present time, but the petrochems are expected to continue brighter than ever. Their prospects are good into 1963.

Calcium carbide and petrochemicals were the stars of the 1960 chemical year in France, where sales are estimated to have risen about 20 percent for the industry as a whole over the $2.9 billion volume of 1959. Now, however, there are some signs that calcium carbide may fade a bit, but petrochemicals are expected to continue their rapid expansion into 1963. So far, about thirty-five French chemical companies have reported their sales results for last year, and the average overall gain is 18 percent, with only one of the thirty-five (a fertilizer supplier) showing a sales dip.

Earnings reports for these companies aren't yet available. The figures show that the two stand-out 1960 sales performers with gains of over 60 percent are Keller et Leleux and Acetylene et Electro-Metallurgie, a company which Keller et Leleux has a 17.2 percent interest. Their secret of success is simple: greatly increase capacity of calcium carbide.

A Big Gain—63 Percent

Keller et Leleux reports sales of $4.5 million for 1960, $2.2 million in the first half and $2.3 million in the second, against $2.76 million for all 1959—a gain of 63 percent.

Acetylene et Electro-Metallurgie shows volume of $7.2 million for last year, $3.3 million in the first half and $3.9 million in the second half—against $4.5 million for all of 1959, a 60.5 percent increase.

Another calcium carbide producer, Produits Azotes, also shows a good 1960 gain with sales of $20.4 million, an increase of 40 percent over 1959 results of $17 million.

With the exception of this calcium carbide surge, petrochemicals were the outstanding performers in the sales growth race in France last year, with volume increases estimated at 30 percent or better.

Esso Standard of France, owned 81.5 percent by Standard Oil Company (New Jersey) and Gulf Oil Corporation, reports that while its total sales volume rose only 5.3 percent in 1960 to about $465 million, petrochemical sales rose 34 percent to $18.4 million and 63 percent in tonnage to 131,500 metric tons of various products.

This rapid rise in petrochemicals for Esso last year is attributed to starting up of new facilities at its Port Jerome refinery in 1959.

Two other petrochemical companies whose chemical business isn't buried deeply in overall company figures are Shell-Saint-Gobain and Naphtachimie.

Shell-Saint-Gobain, which produces detergent raw materials, solvents, various resins and aromatic organics, shows a 30 percent sales gain in 1960 to $28.7 million. Shell-Saint-Gobain is owned by Royal Dutch Shell, Produits Chimiques de Berre and Saint-Gobain.

Naphtachimie produces ethylene, propylene and polyethylene with total petrochemical output estimated at around 40,000 metric tons a year—of which about 3,000 tons is low-pressure polyethylene under Ziegler license. It reports a 29.3

—Continued on page 9

CELANESE EXECUTIVE V. P.: James R. Kennedy, appointed an executive vice-president of Celanese Corporation of America, New York, in charge of finance and administration.

Gases for Petrochems: Airco Readying Them

Air Reduction Sales Company is getting ready to build its first air separation facility for service to the petrochemical industry. A $5 million unit will be put up adjacent to SunOlin Chemical Company's new ethylene and ethylene oxide plants which are due to go on stream in late 1961 at Claymont, Del.

Airco's plant, piping oxygen directly into the SunOlin ethylene oxide unit, is slated to have a total capacity in excess of 350 tons of oxygen per day. Initially, about 120 tons a day will go to SunOlin, the remainder being shared by other companies in the area.

At the same time, high-purity nitrogen will be produced at an initial rate of about twenty-five tons per day for use in chemical processing.

SunOlin plans to turn out 225 million pounds of ethylene and 55 million pounds of ethylene oxide yearly at the Claymont plant, using raw materials supplied from Sun Oil Company's Marcus Hook, Pa., refinery immediately adjacent.

Airco's plant is said to represent a new "over-the-fence" concept developed by

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Sulfur Industry Seems to Be All at Sea These Days

Though business isn't at all bad, the sulfur industry seems to be all at sea these days—literally, that is.

A little over a month ago, Texas Gulf Sulphur Company turned up with the announcement that it had launched what was purported to be the first ocean-going vessel devoted exclusively to the transport of molten sulfur (OPD, 1/30/61).

Now Freeport Sulphur Company is in with the news that it has just completed the largest shipment of liquid sulfur via sea-going vessel in the history of the industry.

A record 16,100 long tons of molten sulfur, kept hotter than boiling water en route, was transported by the SS Louisiana Sulphur from Port Sulphur, La., to Tampa, Fla.

The trip marked the inauguration of the coastwise tanker service which is part of a new $23 million program to move the company's sulfur in liquid form—rather than the traditional solid lump form—into major market areas for storage and trans-shipment to its customers.

Later the Louisiana Sulphur will extend its deliveries to terminals up the Atlantic Coast as far north as Bucksport, Maine.

In December, Freeport began barge service on the inland waterways. Terminal locations are at Joliet, Ill., and Wellsville, Ohio.

The new Tampa terminal serves an area which has the greatest concentration of sulfur users anywhere in the United States. Over one-half million tons of sulfur are consumed there annually, primarily in the production of triple superphosphate fertilizers.

The SS Louisiana Sulphur is a newly converted T-2 tanker and was on her maiden voyage. The vessel, which is be-

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Diamond Alkali Opens Phthaloyl Chloride Unit

Semi-commercial production of isophthaloyl and terephthaloyl chlorides has just started up at Diamond Alkali Company's new Greens Bayou, Tex., installation.

The materials, available in high-purity flaked form, are used as intermediates in polymer preparations and in organic syntheses for dyes, plasticizers and other outlets requiring high reactivity, favorable solubility characteristics and low melting points.

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PFIZER QUALITY CHIEF: Dr. C. L. Wrenshall, elevated from director of technical service to director of quality control by Chas. Pfizer & Co., Brooklyn, N.Y.

Carbide Will Fight Divestiture of Visking

Union Carbide Corporation will appeal to the full Federal Trade Commission last week's antitrust decision requiring that the company divest itself of Visking Corporation.

Carbide says that Hearing Examiner Abner E. Lipscomb's initial decision "will be appealed immediately." Under FTC rules, the decision is not binding and may be appealed, stayed or docketed for review. Meanwhile, Carbide anticipates that business will be conducted "in the normal fashion."

The company also points out that this decision does not require divestiture of Visking assets used in the manufacture of sausage casings.

Carbide's acquisition of Visking in 1956 was held by Examiner Lipscomb to have violated the Clayton act by tending to lessen competition and create a monopoly in the manufacture and sale of polyethylene film-grade resins and polyethylene film used for flexible packaging.

Prior to the merger, Visking was the largest manufacturer of this film and purchased much of its resin requirements from Carbide.

Through the acquisition, the examiner said, "Union Carbide acquired the power to remove from the market and allocate to itself exclusively the purchasing power of the largest single customer in the market for film-grade polyethylene resins."

In 1956, Visking reportedly purchased

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Chemists' Club Will Mark Anniversary of Its Building

The Chemists' Club will mark the fifthtieth anniversary of its building at 52 East 41st Street in New York by open house festivities on March 15. There will be two speakers: August Kinzel, who will report on "Chemistry in Government," and L. E. Bergen, who will discuss "The Future of the Chemists' Club." Cocktails will be served at 5 p.m., with dinner following one hour later.

Petrochemical Makers Zero In On Big 1965 Chemical Target: 40 Percent of Nation's Output

Petrochemical makers should be turning out 85 billion pounds of product by 1965, for a 50 percent increase over anticipated 1961 volume of 56 billion pounds. If the target is hit—it was set in view of industry marksmen at last week's meeting of the American Institute of Chemical Engineers in New Orleans, La.—the petrochemical sector will have garnered 40 percent of the nation's chemical business, as against a current 30 percent. Setting the target up at the institute's forty-fourth national meeting was Karl J. Nelson, vice-president of Enjay Chemical Company, New York.

Through the years the Gulf Coast "has been getting a larger and larger share of the petrochemical investment in this country," Mr. Nelson observed.

Still a Popular Area

This area, he said, will continue to receive a large share of new construction for petrochemical raw materials and intermediates. But its relative share will decline, he added, "as construction, fuel and labor costs approach those of other parts of the country."

A transportation advantage, by virtue of nearness to chemical processing plants, could tip the balance in favor of New Jersey and other east coast areas, it was indicated.

This view was seconded by James W. Bateman, of Continental Oil Company, Houston, Tex., who warned that the Gulf Coast petrochemical business "will find itself in an increasingly competitive situation."

He, too, saw the East Coast enjoying a major advantage with its large population and numerous chemical complexes. "However," he added, "as the petrochemical industry has grown here, it has become a handsome market for many types of processing chemicals and intermediates. Thus growth feeds on itself."

Citing five newly-slated major projects in New Jersey, Herman K. Nieuwenhuis, president of Chemical Products Associates, Inc., New York, found the East Coast petrochemical maker holding "various aces up his sleeve" and becoming increasingly bullish about it.

The East Coast industry, Mr. Nieuwenhuis said, has an abundance of refinery gases available and may be able to use petroleum coke as a low cost source of

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Fertilizer Bids Sought By Pakistan Government

The government of Pakistan is seeking bids from American fertilizer suppliers for various quantities of fertilizer material, to be delivered by May 15.

The bids will be opened at 10 a.m., March 13 by the Department of Supply and Development at Karachi.

Materials to be bought are: 16,000 long tons of synthetic ammonium sulfate, minimum 21 percent nitrogen; 5,000 metric tons of urea, minimum 46 percent nitrogen; 5,000 metric tons of ammonium nitrate, minimum 26½ percent nitrogen, and fifty metric tons of potassium sulfate, minimum 50 percent K_2O. Further details on the invitation are obtainable from the chemical and rubber division of the Business & Defense Services Administration.

CCDA AWARD WINNER: Dr. Carl F. Prutton, a board member of and consultant for Food Machinery & Chemical Corporation, who will receive the 1961 honor award of the Commercial Chemical Development Association at a dinner March 16 at the Roosevelt hotel, New York.

Phosphoric Demand: Big for Wet Process

Demand for wet-process phosphoric acid for use in fertilizers continues on the increase, gaining an average 110,000 tons a year. Production in 1960 was estimated at 1.3 million tons in a report made to the American Institute of Chemical Engineers last week.

T. P. Hignett, Tennessee Valley Authority engineer, underscored the material's rapid growth since World War II at AIChE's annual meeting in New Orleans, La.

Before the war, annual production was only 120,000 tons. After the war it increased to 400,000 tons annually. In 1958, Mr. Hignett noted, 1,070,000 tons were produced and the estimated 1960 total was 1.3 million.

Since 1952, the TVA man pointed out, production of wet-process phosphoric acid

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Winterbourne Expands

S. Winterbourne & Co., New York natural resins firm, has acquired the natural resin division, including the entire stock of gums, of Gillespie-Rogers-Pyatt Company, also of that city.

UK, France, Italy Are Fast Movers In Chemical Race

OPD's European Editor reports "in depth" on the current French chemical scene on page 5.

The United Kingdom's heavy organic chemical output has increased 280 percent in ten years. Coming up fast is France's petrochemical industry, with an expansion rate higher than in any other European country. And there is also Italy, with "one of the most lively and dynamic" chemical industries on the continent.

Such was the gist of views expressed at a symposium on the European chemical industry, heard at last week's meeting of the American Institute of Chemical Engineers in New Orleans, La.

'Continued Share' for UK

Despite increasing competition, the size and dynamism of the United Kingdom's burgeoning organic chemical industry "should insure a continued share" of world markets for British companies, the meeting was told.

Harold P. Hodges, of Esso Export Corporation, New York, said:

"The organic chemical industry in the United Kingdom together with the industries converting organic chemicals into end products such as plastics, synthetic rubber, detergents, etc., show the most dynamic growth of any major manufacturing industry in Britain."

From 1949 to 1959, the output of organic chemicals increased 280 percent, or a rate of 11 percent annually, Mr. Hodges reported. This compares with a 7 percent annual gain for all chemicals, 15 percent for plastics and 37 percent for petrochemicals. The average annual growth for motor chemicals was 6 percent, and for all manufacturing, 3 percent.

Presenting a paper on the French petrochemical industry, F. A. Escherich, of Mobil Chemical Company, New York, predicted that "if current plans materialize, French chemical production will have narrowed the gap considerably and

—*Continued on page 53*

Oil Additive Producer Acquired by Studebaker

Studebaker-Packard Corporation has acquired Chemical Compounds, Inc., a St. Joseph, Mo., manufacturer of motor oil additives, for cash and payments out of future earnings.

The latest acquisition is the sixth since the automobile company acquired Gering Plastics, Kenilworth, N.J., in 1959.

Studebaker won't disclose the purchase price for Chemical Compounds or its annual sales, but says that in the fiscal year ended this February 28 Chemical Compounds had pre-tax earnings of about $1.25 million.

Chemical Compounds' principal product is "STP," which is added to engine lubricating oil to decrease the thining of oil when heated. The material is said to be essentially a viscosity index improver for reducing oil consumption and improving engine compression.

Association Meetings

ACHEMA 1961, German chemical engineering exposition and congress, Frankfurt am Maim, Germany, June 9-17.

American Chemical Society, national meeting, St. Louis, Mo., March 21-30.

American Institute of Chemical Engineers, Sheraton-Cleveland hotel, Cleveland, Ohio, May 7-10.

American Institute of Chemists, annual meeting, Statler hotel, Washington, D. C., May 10-12.

American Oil Chemists' Society, annual meeting, Sheraton-Jefferson hotel, St. Louis, Mo., May 1-3.

American Pharmaceutical Association, annual convention, Sherman hotel, Chicago, April 23-28.

American Society of Perfumers, annual symposium, Essex House, New York, April 13.

American Society for Testing Materials, annual meeting, Chalfonte-Haddon Hall, Atlantic City, N. J., June 25-30.

American Zinc Institute, annual meeting, Drake hotel, Chicago, May 1-2.

Animal Health Institute, annual meeting, Mayflower hotel, Washington, April 24-26.

Chemical Market Research Association, annual meeting, Plaza hotel, New York, May 17-18.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 15-17.

Chemurgic Council, annual conference, Sheraton-Gibson hotel, Cincinnati, Ohio, April 12-14.

Commercial Chemical Development Association, annual meeting, Roosevelt hotel, New York, March 16; annual outing, Bedford Springs hotel, Bedford Springs, Pa., May 24-25.

Drug,Chemical & Allied Trades Association, annual meeting, Pocono Manor Inn, Pocono Manor, Pa., September 14-17.

Electrochemical Society, Claypool hotel, Indianapolis, Ind., April 30-May 4.

Federation of Societies for Paint Technology, annual meeting, Shoreham and Sheraton-Park hotels, Washington, November 2-4.

Flavoring Extract Manufacturers Association, annual meeting, Savoy-Hilton hotel, New York, May 14-17.

International Congress on Pure & Applied Chemistry, Montreal, Canada, August 6-12.

Lead Industries Association, annual meeting, Drake hotel, Chicago, May 2-3.

Manufacturing Chemists' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 8-10.

National Agricultural Chemicals Association, annual meeting, Homestead, Hot Springs, Va., October 29-November 1.

National Paint, Varnish & Lacquer Association annual meeting, Statler-Hilton hotel, Washington, October 30-November 1.

National Petroleum Association, spring meeting, Sheraton hotel, Cleveland, Ohio, April 19-20.

National Plant Food Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 11-14.

Pharmaceutical Manufacturers Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 30-May 3.

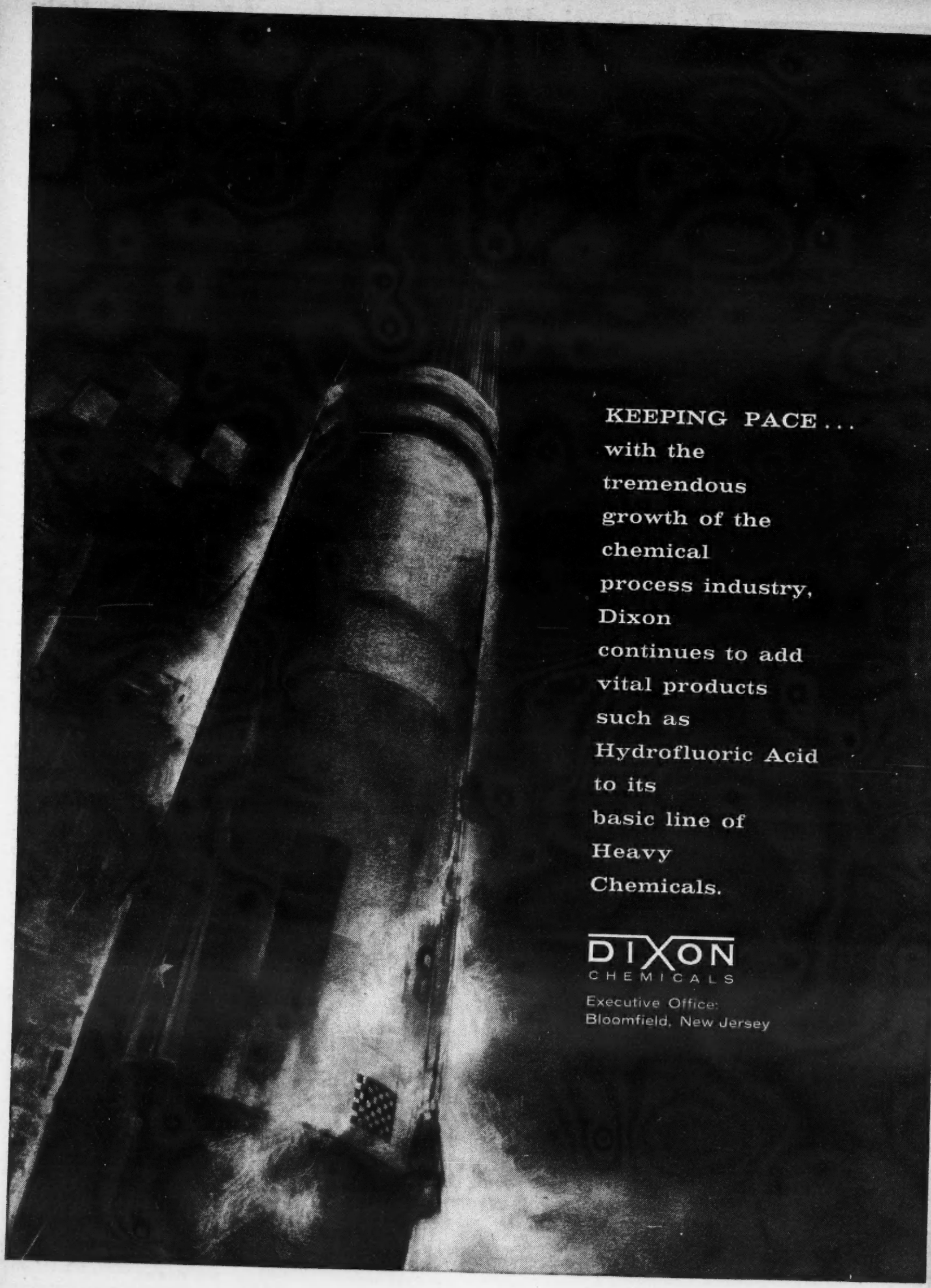
Plastics Exposition, sponsored by the Society of the Plastics Industry, Coliseum, New York, June 5-9.

Proprietary Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 14-17.

Society of the Plastics Industry, western section conference, del Coronado hotel, Coronado, Calif., April 20-21; national conference, Commodore hotel, New York, June 5-9.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, March 14.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 9-11.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tremendous
growth of the
chemical
process industry,
Dixon
continues to add
vital products
such as
Hydrofluoric Acid
to its
basic line of
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French Chemical Companies Rode the Crest—Sales Up 20 Percent in '60

—Continued from page 5

percent gain in sales last year to $21 million.

Naphtachimie is owned by the French subsidiary of British Petroleum, Pechiney and the chemical holding company Seichime, which is in turn controlled by Pechiney. The petrochemical facilities are located near BP's refinery in the Marseilles area.

Unless the European economy suffers an unanticipated breakdown in the next few years, these petrochemical gains in France are only the start, for the companies are expanding their interests rapidly and believe the markets for their output will grow as fast.

It's now clear that petrochemical product capacities by the end of 1962 will exceed the targets originally set out in the government's "plan." A government agency periodically sets up certain goals for industrial investment over a period of years to help coordinate growth of the whole economy.

Petrochemical Targets for 1962

Current estimates predict the following gains in basic petrochemical materials from the end of 1959 to the end of 1962: olefins, 334,000 metric tons a year capacity to 421,000 tons; diolefins, 12,000 tons to 99,000 tons; aromatics, 55,000 tons to 144,000 tons.

The growth in chemical products derived from these basic materials is expected to follow suit: products from olefins, from 264,000 metric tons a little over a year ago to 370,000 tons at the end of 1962; diolefins, 1,000 tons to 106,000 tons; aromatics, 55,000 tons to 78,000 tons.

Industry estimates put the total petrochemical capital investment last year at around $55 million, about a quarter of the whole chemical industry, and the total planned expansion of the industry from the beginning of 1960 through 1962 has been estimated to involve an investment of around $250 million.

At the end of 1960, the Groupement de l'Industrie Chimique de Synthese, created in April last year by the major French companies to raise funds for their chronically capital-short industry, announced its first bond issue of $15.5 million.

It is significant that seven of the thirteen company expansion projects benefiting from the bond issue are devoted to hydrocarbons and five of the seven are petrochemical. Under the financing syndicate scheme, each individual company benefiting from the bond issue guarantees a proportionate share of the bonds.

The two projects based on hydrocarbons from coal point up the continued importance of this chemical raw material in France, but the role of coal as a chemical raw material is decreasing. The Minister for Industry earlier this year rejected pleas from some hard-hit coal-mining areas for carbon-chemical operations.

The government clearly indicated that in its view coal chemicals can compete economically with petrochemicals only when they are by-products of large-scale coal utilization for other purposes, primarily production of coke for steel mills. Both of the carbon-chemical projects covered by the bond issue are in the northern steel-producing part of France.

$10 Million Petrochem Installations

In January, Esso Standard announced plans for two new petrochemical installations at its Port Jerome refinery which will represent an investment of nearly $10 million.

One of the units will produce additives for lubricating oils and is scheduled to be in production by the end of this year. The second, to start up during the first half of next year, will be concentrated on aromatic hydrocarbons.

This Esso expansion will add up to 28,000 metric tons a year capacity of orthoxylene used in plastics and paints; 16,000 tons a year of paraxylene and 10,000 tons a year of aromatic solvents.

In addition, Esso has plans for 10,000 tons a year capacity for high-purity propylene for polypropylene production and 20,000 tons a year of propylene for other chemicals.

In the spring of this year, Esso expects to start up a carbon black plant producing 25,000 metric tons a year; and toward the end of the year a synthetic rubber venture with Firestone Tire & Rubber Company will start up. Esso also participates in Ste du Caoutchouc Butyl (SOCABU) which produces butyl rubber.

SOCABU's 1960 output was about 17,500 metric tons but this is expected to rise to 23-25,000 tons in the current year.

Other companies participating in SOCABU are Cie Francaise de Raffinage, whose Gonfreville refinery is in the same region; the chemical firms, Kuhlmann and Rhone-Poulenc; and the tire and rubber firms, Dunlop of France and Kleber-Colombes.

Esso's current capacity for high-purity ethylene, used by two other companies in producing polyethylene, is 80,000 metric tons a year, from a steam cracking unit. Esso also produces 30,000 tons a year of propylene and 8,000 tons of butadiene.

But Esso isn't alone in expanding its petrochemical production at the mouth of the Seine river near Le Havre. Cie Francaise de Raffinage (CFR) is planning to install a new "steam cracker" at Gonfreville which will crack naphtha to produce ethylene, propylene, butadiene and butylene.

This new unit is planned to go into operation in 1963 and the only capacity figure mentioned so far is that it will raise the CFR ethylene capacity from the present 30,000 metric tons a year to 80,000 tons a year.

This new ethylene capacity is the raw material base for the recent formation of Petroplastique by CFR and the French subsidiary of El Paso Natural Gas. Petroplastique will jump into the conventional polyethylene business with a $12.2 million 20,000-metric-tons-a-year plant at Gonfreville, to begin operations in 1963.

This plant's capacity is not included in the table on this page showing estimates of capacities at the end of 1962, and it will raise total French estimated capacity to 91,000 tons a year.

CFR is already in the low-pressure polyethylene business, associated with Rhone-Poulenc and Kuhlmann, with a Phillips Petroleum license. This plant has a current capacity estimated at 6,000 metric tons a year, being supplied by the present ethylene facilities of CFR.

Detergent Base Chemicals

Another joint venture, Petrosynthese, produces 24,000 tons a year of dodecylbenzene and other detergent base chemicals. Participating with CFR in Petrosynthese are Oronite Chemical Division of Standard Oil Company of California and Atlantigue Progil Electrochimie, itself the joint creature of Antar Petroles and Progil Electrochimie which is in turn owned by Progil and Ugine.

Another consumer of CFR ethylene is the company Marles-Kuhlmann, owned by Kuhlmann and the coal combine Houilleres du Nord. Marles-Kuhlmann uses the balance of CFR ethylene output to produce ethylene oxide and its derivatives.

A joint venture of Progil and Oronite Chemical, Orogil, takes CFR raw materials to make alkylphenols for lubricant additives, detergents and resins in a plant with 6,000 tons a year capacity.

CFR produces 13,000 metric tons of butylene a year, which is part of the supply of SOCABU for butyl rubber production; 23,000 tons of propylene tetramers; 15,000 tons of propylene; 30,000 tons of ethylene, and ninety-five tons a day of high-purity propylene for polypropylene.

Using funds from the Groupement de l'Industries Chimique de Synthese bond issue, both Progil Electrochimie and Marles-Kuhlmann are planning to expand their petrochemical production. Progil Electrochemie will add facilities for production of phenol and acentone and chloride solvents. Marles-Kuhlmann will expand its ethylene oxide output, get into the propylene oxide field as well.

Another petrochemical operation in the lower Seine area is Industrielle des Derives de l'Acetylene, which is owned almost entirely by Ugine. This company plans to expand its output of butanol from the 7,000 metric tons estimated for this year to about 10,000 tons. This expansion and construction of a plant to produce methylethyl ketone will be partially financed by funds from the syndicate bond issue.

Two other polyethylene plants operate in the lower Seine area are Ethylene Plastique Normandie, a conventional polyethylene producer operating under an Imperial Chemical Industries license, and Normande de Matieres Plastiques, a low-pressure Ziegler license company.

Ethylene Plastique Normandie takes ethylene from Esso's Port Jerome refinery and its output is expected to rise to about 45,000 tons this year from an estimated 30,000 tons last year. This company is owned by Ethylene Plastique, the first French polyethylene producer basing output on ethylene from coal gasification, Air Liquide, Pechiney, Huiles Goudrons Derives.

Ethylene Plastique itself is owned by Houillere du Nord, Pechiney, Huiles Goudrons and Air Liquide.

Normande de Matieres Plastiques, owned by Air Liquide and Huiles Goudrons jointly, will raise its low-pressure capacity to an expected 6,000 tons annually by next year.

Another major petrochemical area is around Marseilles where the refineries of the French units of Royal Dutch Shell and British Petroleum supply most of the raw materials. The Shell refinery supplies Shell-Saint-Gobain which reported a 30 percent increase in sales last year for its detergent raw materials, resins, solvents and insecticides.

The Cabot-France Operation

Cabot-France, French unit of Cabot Corporation, draws its carbon black raw material from the Shell refinery. Cabot-France, which started production in 1957, is planning to boost its capacity to 45,000 metric tons a year from the present 20,000 tons a year, with 10-15,000 tons of that output going into the export market.

Shell will also supply the basic feed materials for Elastomers de Synthese, which will produce both SBR synthetic rubber and polybutadiene. This company plans to start up SBR production in May with initial capacity of 50,000 metric tons a year. The polybutadiene capacity will be 25,000 tons a year.

Owners of this company are Shell Francaise, Products Chimiques de Berre, Shell-Saint-Gobain, Cabot, Texas Butadiene, Michelin, Dunlop and Kleber-Colombes.

The British Petroleum refinery supplies Naphtachimie, which is taking the largest single share of the recent chemical industry bond issue for general expansion and this year it will enter butadiene production.

A third petrochemical center has grown up around the Antar Petroles refineries on the Atlantic coast near Sainte-Nazaire. Total petrochemical output last year was about 65,000 tons of product and this is being increased to 75,000 metric tons by next year. Atlantique-Progil Electrochimie currently produces about 25,000 tons a year of cumene from which phenol and acetone are produced.

Working with Oronite, Antar also will enter the paraxylene business. The Antar complex and the new Esso aromatic project on the Seine will be virtually the only French competitors in the petrochemical-based aromatic organics field.

The fourth major petrochemical center is the huge natural gas field at Lacq in southwestern France. There the major French companies have joined with the government-controlled Ste. National Petroles d'Aquitaine to exploit the chemical side of the gas field.

In the chemical field, SNPA's principal business is recovery of sulfur from the Lacq gas, which has one of the highest sulfur contents in the world. Sulfur output last year was 790,500 metric tons, against 426,000 tons in 1959, and 1961 production is expected to exceed 1 million tons.

SNPA recently decided to press more seriously on its own into petrochemicals and will build an ethylene plant with 25,000 metric tons a year capacity and a benzene plant with 70,000 tons a year capacity to be in operation the second half of next year.

Ethylene-Plastique earlier announced plans for a conventional polyethylene plant at Lacq with an initial capacity reported to be around 20,000 tons. Start-up date for this plant is a little uncertain, but it is thought to be planned for late 1962 or early 1963.

A group of five joint venture petrochemical concerns in which Pechiney, Saint-Gobain, Pierrefitte and Kuhlmann are associated in various ways has been created to produce acetylene, ammonia fertilizers, ammonium nitrate, urea, methanol, acetaldehyde and vinyl chloride from the Lacq gas.

Early in January acetylene production started and this will be used to produce acetaldehyde. Vinyl chloride output is expected to begin this month.

Six Times the Base Year

Groupement de l'Industries Chimique de Synthese, in its bond issue prospectus, estimates that 1960 organic chemical production in France was six times the base year of 1952, while the chemical industry as a whole was three times the 1952 base and French industrial production as a whole was up only 70 percent.

Much of this increased French chemical output is finding its way into world export markets. Statistics show that since the last devaluation of the franc and creation of the new franc, chemical exports have grown rapidly.

A PETROCHEMICAL PROJECTION

How the French Plan to Grow

	1959 Capacity	1962 Estimated Capacity
	(Metric tons, in thousands)	
Acetone	36	57.3
Ammonia	380	435
Carbon Black	45	95
Ethylene	51.4	155
Methanol	45	90
Polyethylene	19.3	71
Polystyrene	31	60
PVC	80	130
Sulfur	633	1,283
Syn. Rubber	6	70-100

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, March 3 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil cns ..... lb. 1.90 2.40
Acacia (see Arabic gum).
Acetaldehyde, 99%, dms., c.l., frt. alld lb. .12 - —
dms., l.c.l., frt. alld ..... lb. .13½- —
tanks, frt. alld ..... lb. 10 - —
Acetaldehyde prices 1c. higher in West.
Acetaldol (see Aldol)
Acetanilide tech. flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls. bgs. ton lots, frt alld. lb. .33½- —
bbls. bgs. smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid comi. or redist., 28%, bbls 100 lbs 4.80 - —
56%, bbls. 100 lbs 8.25 - —
70% bbls. 100 lbs 9.95 - —
80% bbls 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., c.l., dlvd. E 100 lbs. 18.75 - —
tech., dms., c.l., dlvd. E. 100 lbs. 13.75 - —
dms., l.c.l., dlvd. E 100 lbs. 15.25 - —
tanks, dlvd. E 100 lbs. 10.00 - —
USP, tanks, dlvd. E 100 lbs. 13.00 - —
Acetic anhydride aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret dms., l.c.l., dlvd E. lb. .18 - —
tanks, dlvd E lb 14 - —
Acetic anhydride prices 1c. higher in West.
Acetoacetanilide fib dms., c.l., dlvd lb. .80 - —
fib dms. l.c.l., dlvd lb. 81 - —
Acetoacet-o-chloroanilide, fib dms., c.l., dlvd lb 1.35 - —
fib dms., l.c.l., dlvd lb 1.36 - —
Acetoacet-o-toluidide fib dms., c.l., dlvd lb .82 - —
fib dms., l.c.l. dlvd lb. 83 - —
Acetone, CP, dms., c.l., dlvd lb 10½- —
dms., l.c.l., dlvd lb. 12 - —
tanks, dlvd. lb. .08 - —
Acetonitrile, dms., c.l., frt. alld lb. .34½- —
dms., l.c.l., frt. alld lb. .36 - —
tanks, frt. alld lb. .32 - —
Acetophenetidin, USP, powd., 200-lb. dms., 1.000 lbs., frt. alld lb. 1.20 - —
100-lb dms. 1.000 lbs. frt alld lb. 1.22 - —
Acetophenone cns dms lb 42 1.30
Tech., dms., c.l., works ..... lb 47 - —
dms., l.c.l. works ..... lb 47¾- —
tanks, works ..... lb 45 - —
N-Acetyl-p-aminophenol, dms., t.l. (min 23.000 lbs.), frt. adjusted lb. 1.30 - —
dms., 1.000-lb. lots, same basis lb. 1.40 - 1.45
dms., 100-lb lots same basis lb. 1.54 - 1.57
Acetylene black imp ogs., c.l. duty and freight extra lb 20 - —
cs., l.c.l., ex whse lb. 25½ .31
Acetylene tetrabromide, 16-dm. lots or more f.o.b works lb 53 - —
Acetylsalicylic acid, USP, cryst (20, 40 mesh), powd (80 mesh) 250-lb dms. c.l. pt of shipt lb 56¼ - —
USP 10% starch granulation, 12-50 mesh white, 250-lb dms., c.l., same basis lb 56¼ - —
(Pink and green granulations 5c. per lb higher.)
Freight equald shipt identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret dms. c.l. frt alld. E of Denver lb. .35½ - —
non-ret dms. l.c.l., frt. alld E. of Denver lb. 36½- —
tanks frt alld E of Denver. lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret dms., l.c.l., frt. alld. E. of Denver lb. 40½- —
tanks, frt alld. E of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls lb 50 .55
Acrolein, tech., dms., c.l., works lb 36 - —
dms. l.c.l. works lb. 36¾ - —
tanks, works ..... lb .31 - —
Acrylamide, dms t.l., f.o.b. works. lb. 58 - —
dms. t.t.l. same basis lb. 60 - —
Acrylic acid, glacial, dms., c.l., t.l. dlvd lb. 42½ - —
dms., l.c.l., t.t.l., dlvd lb. 43½- —
tanks, dlvd. ..... lb. 40 - —
tech., esterification, tanks, frt. alld. lb. 38 - —
tech., polymerization, tanks, same basis lb. .38 - —
Acrylonitrile dms., c.l., t.l., frt. equald lb. 26 - —
dms. l.c.l., t.t.l., frt. alld lb. 27 - —
tanks frt. equald lb 23 - —

Abies Siberica Oil—Ammonium Bicarbonate

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd..... lb. .32¼- —
bgs., l.c.l., dlvd. ..... lb 35 - —
Agar, USP Kobe No. 1, strip, bls lb. 3.00 - 3.10
powd., 30 mesh., fib. dms lb. 2.40 - 2.60
dl-Alanine, dms. 100-lbs or more, f.o.b works lb 5.25 - —
dms. 1-99 lbs., same basis lb.10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech. fib dms. c.l., t.l. dlvd lb .99 - —
fib dms. l.c.l. dlvd lb 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root bgs lb 1.50 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb. 2.45 - —
Alkali blue prices 1c higher W of Rockies
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20% dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms frt alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd..... lb. .32½- —
dms., l.c.l., dlvd..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs. or more, works lb. 1.50 - —
55-lb. cbys., 1,045 to 4,95... lbs. works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs works. lb. 1.60 - —
Allyl chloride, dms., c.l., dlvd... lb. .17½- —
dms., l.c.l., dlvd..... lb. .19 - —
tanks, dlvd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).
Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb. 2.75 3.45
NF, bots. ..... lb. 3.00 3.30
sweet, USP, cns., dms..... lb. .60 - .70
Aloe, Cape, cs. ..... lb. .33 - .40
powd., cs ..... lb .80 .85
Curacao, kgs. ..... lb. .75 - —
powd., kgs. ..... lb. .85 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E	east	p-	para
a.p.a.	available phosphoric acid	e.p.	end point	Pac.	Pacific
approx.	approximately	equald.	equalized	pf	proof
artif	artificial	exp.	expressed	phos.	phosphate
ASTM	American Society for Testing Materials	Ext.	external	photo.	photographic
		F	fahrenheit	pkgs.	packages
Atl.	Atlantic	ferment.	fermentation	powd.	powdered
Be.	Baume	f.f.a.	free fatty acid	precip.	precipitated
bbls.	barrels	f.f.c.	free from chlorine	prod.	producer
bgs.	bags	fib.	fiber	pt	point
bls.	bales	f.o.b.	free on board	pulv.	pulverized
bots.	bottles	f.p.a.	free of prussic acid	purif.	purified
b.p.	boiling point	frt.	freight	redist.	redistilled
b.p.l.	bone phosphate of lime	gal.	gallon	refd.	refined
b.r.	boiling range	gran.	granular	refy.	refinery
bxs.	boxes	grd.	ground	reg.	regular
C	centigrade	i.&a.	iron and aluminum	resub.	resublimed
cbys.	carboys	i.b.p.	initial boiling point	ret.	returnable
CD	completely denatured	imp.	imported	SD	specially denatured
c.i.f.	cost, insurance, freight	incl.	included	s.d.	single distilled
		indust.	industrial	S.E.	southeast
cks.	casks	kgs.	kegs	sec.	secondary
c.l.	carlots	l-	laevo	secs	seconds
cns.	cans	lacq.	lacquer	s.g.	specific gravity
coml.	commercial	lb.	pound	shipt.	shipment
conc.	concentrated	l.c.l.	less carlots	soln.	solution
CP	chemically pure	l.t.l.	less truckload	s.u.	standard unit
cps.	centipoises	liq.	liquid	syn.	synthetic
cryst.	crystalline	mfrs.	manufacturers	tanks.	railroad tankcars
cs	cases	m-	meta	tech.	technical
ctns.	cartons	m.a.p.	mixed aniline point	tert-	tertiary
cyls.	cylinders	min.	minimum	t.l.	truckloads
d-	dextro	m.p.	melting point	t.w.	tankwagons
dbl.	double	N-	nitrogen	USP	U. S. Pharmacopoeia
denat.	denatured	n-	normal		
dest-dist.	destructively—distilled	nat	natural	vis.	viscosity
		neut	neutral	VM&P	varnish makers & painters
dl-	dextro-laevo	NF	National Formulary		
dist.	distilled	NNR	New and Nonofficial Remedies	W.	west
				whse.	warehouse
				w.w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Alein, USP, bbls., dms., kgs... lb. 2.20 - 2.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., works 100 lbs. 4.30 - —
Lump, dms., works ..... 100 lbs 5.05 - —
Powd., dms., works..... 100 lbs. 5.20 - —
USP, burnt., dms ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Alum potassium, gran., bgs., works. 100 lbs. 4.55 - —
Lump, dms., works ..... 100 lbs. 5.30 - —
Powd., dms., works..... 100 lbs. 5.45 - —
USP burnt., dms ..... lb. .20 .21
USP hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms ..... lb. .17 - —
Alumina, calcined bgs., c.l., works. lb. .0535- —
bgs., l.c.l., works ..... lb. .056 - .0835
Aluminum acetate, basic soln., 24%, bbls. l.c.l. works lb. .14 - —
Aluminum chloride coml. anhyd., dms., c.l., works, frt equald lb. .16 - —
dms. l.c.l. works lb. 16½- —
cryst., dms. c.l. works 100 lbs 21.00 - —
dms., l.c.l. works 100 lbs.21.50 - —
Soln., 32° cbys., c.l., works lb. 0495- —
cbys., l.c.l., works lb. 0570- .1095
tanks, works 100 lbs. 3.95 - —
NF, gran., dms. works lb. .31 .32
Aluminum fluoride tech., anhyd., bgs., c.l., works lb. .16¼- —
bgs., l.c.l. works lb. .17¼- .19¼
bulk, c.l. basis 80% lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c per lb higher
Aluminum formate, basic soln., containers extra, c.l., works. 100 lbs.11.00 - —
containers extra, l.c.l. works. 100 lbs.11.50 - —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20.000-40,000 lb. lots, same basis lb. .0395- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0495- —
bulk, c.l., same basis ..... lb. .0330- —
Light, bgs., c.l.; t.l., works ..... lb. .09½- —
bgs., t.l., to c.l., works..... lb. .10½- —
bgs., l.t.l., works..... lb. .11½- —
Aluminum hydroxide, dried, USP XV fib dms., works lb. .82½- —
fib dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms. works. lb. .19 - —
fib dms. contract, works lb. .18 - —
Aluminum hydroxide, tech., powd., (see Aluminum hydrate)
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb lots, frt. alld lb. .2810- —
50-lb pigs, 10,000-lb lots, frt alld. lb. .26 - —
Aluminum oxide, amorphous (see Alumina, calcined)
Aluminum paste lining, extra-fine, dms lb. .71 - —
Standard grade, dms lb. .48½- —
Aluminum powder, lining, extra-fine, dms lb. 1.13 - —
Standard grade, dms lb. .83 - —
Aluminum paste and powder prices are f.o.b. shipping point. Add 1c per lb for 100-lb. dm., 1½c per lb for 50-lb dm., 3c per lb. for 10 lb can and 5c to 12c per lb. for smaller containers. Deduct 1c per lb. for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or more
Aluminum resinate, precip., 2.1% Al, dms lb. .45 - —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 - —
bulk, c.l., same basis ton.40.00 - —
lump, bgs., c.l., same basis ton.44.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 - —
bgs., l.c.l., works, frt. equald, 100 lbs. 4.30 - 8.30
USP, gran., 400-lb. dm., works. lb. .30 - —
USP, powd., dms., works.... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.35 - 1.60
Aminoazotoluene base, bbls 100% basis lb. 1.15 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech., sol'd. dms., frt. alld lb. 2.15 - 3.85
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l., dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms. smaller lots. lbs. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald E. of Rockies ton.92.00 - —
refrigeration, tanks, works, frt. equald, E. of Rockies ton.94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies ton.95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l. works, frt. equald 100 lbs. 8.25 - —
bgs. l.c.l., same basis 100 lbs. 8.65 -12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb. lots, works. lb. 1.90 - —
Ammonium biborate, gran., dms., c.l., works ton 325 - —
dms., ton lots, ex whse. 100 lbs.22.86 - —
dms., smaller lots, ex whse. 100 lbs.24.11 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works..... 100 lbs. 9.00 - —

EFFICIENT ABSORPTION...EXCELLENT STABILITY

STABLETS—vitamin B_{12} adsorbed on a pharmaceutical grade ion-exchange resin—has been found to be an efficiently absorbed form of B_{12}. In addition, this B_{12} resin adsorbate is exceptionally stable in dry multivitamin and multivitamin-mineral formulations.

☐ Available as: STABLETS Type I—1% cyanocobalamin U.S.P. adsorbed on resin; or STABLETS Type II—1% cobalamin concentrate N.F. adsorbed on resin. Investigate today!

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Ammonium bichromate dms., works lb .42 .43
Ammonium bifluoride dms., divd lb .2145- .2245
Ammonium bromide, NF gran., dms, c.l. t.l. frt equald lb .44 - —
dms t.c.l. same basis lb .46 - —
Ammonium carbonate USP lump, dms c.l lb 15½- —
Ammonium chloride, white tech., fine gran. bgs. c.l. works 100 lbs 6.00 —
bgs. t.c.l. works 100 lbs 8.00 8.45
USP gran 250 lb drm lb 17¼ —
Ammonium citrate dibasic 250-lb dm f.o.b works lb .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate tech. 200-lb dm f o b works E lb .45 - —
Ammonium hydroxide (see Ammonia aqeous)
Ammonium iodide NF, 25-lb bar, f.o.b. works lb 4.51 - —
Ammonium lauryl sulfate dms., c.l. frt alld lb 20½ —
dms. t.t.l. frt alld lb 21½ —
tanks frt alld lb 19½ —
Ammonium lignin sulfonate bgs., c.l works 100 lbs 3.25 —
bgs. t.c.l. works 100 lbs 3.40 3.65
Ammonium linoleate 80% dms., works lb .50 .55
Ammonium molybdate, CP cryst., 400 lb dms 15,000 lbs works, lb 1.22 —
400-lb dms. 2,000-lb contracts, works lb 1.23 —
400-lb dms works lb 1.24 —
Ammonium nitrate dom., tertilizer grade 33.5% N bgs. f o b works ton 67.00 - —
Ammonium nitrate, dom., with dolomite 20.5% N, bgs. c.l. Hopewell, Va ton 48.00 - —
Imp. Canadian, 33.5% N eastern bgs c.l., shipt point frt. equald to $3 ton base price ton 70.00 - —
Ammonium oxalate, tech. fine gran. 250-lb dm f o b works E lb .28½- —
Tech powd 200-lb dm. same basis lb 28½- —
Ammonium pentaborate gran bgs., c.l works ton 193.00 —
bgs., ton lots, ex whse 100 lbs 15.27 - —
bgs smaller lots ex 100 lbs 16.52 18.52
Ammonium pentaborate powder $10 per ton higher in bags
Ammonium persulfate, tech, dms., 10-ton lots or more, works lb .18 —
dms. smaller lots, works lb .20 .23
Ammonium phosphate, mono., bgs., c.l. works frt equald lb .09¼ —
bgs t.c.l. same basis lb .10 —
Dibasic NF V bbls., dms lb .46 —
Dibasic tech bgs. c.l. works, frt alld lb .09¼ —
Ammonium silicofluoride dms., works lb 12¼ 13¾
Ammonium sulfamate bgs c.l. t.l., works lb .19 —
bgs t.c.l works lb 20½ .27
Ammonium sulfate standard granular bulk f o b works, base price ton 32.00 - —
Ammonium sulfate, standard granular, purif. c.l. 100 lb bgs., f.o.b works lb 08½ —
Large granular bulk c.l works ton 35 00 —
bgs. c.l. works ton 40 00 —
Tech bulk c.l. t.l. works ton 52 00 —
bgs. c.l. t.l. works ton 56 00 —
bgs t.c.l t.l works 100 lbs 4.20 5.20
Ammonium sulfide sig 40-44 % tanks frt equald 100% basis ton 160.00 —
Ammonium sulfocyanide, tech (see Ammonium thiocyanate)
Ammonium thiocyanate tech cryst dms. c.l. works lb 20 —
dms t.c.l works lb 22 26
Tech. soln 50% tanks, frt. equald basis ammonium thiocyanate content lb .17¼ —
Ammonium thioglycolate, comm., 55-gal dms. ton lots, 100% basis lb 1 15 —
d-Amphetamine hydrochloride mono basic dms lb 17 50 23 50
dl-Amphetamine hydrochloride dibasic dms lb 4.50 6.00
d-Amphetamine phosphate, 6lb dms, 100 lb lots lb 15 00 —
dl-Amphetamine phosphate dms lb 4.20 5 60
d-Amphetamine sulfate 6lb dms, lb 15 00 17 00
dl-Amphetamine sulfate 6lb dms, lb 4.20 5.60
Amyl acetate ex fusel oil, tech. dist from 125 to 150°C. dms. c.l frt alld b. ol Rockies lb 18½ .19
dms t.c.l same basis lb 20 20½
tanks same basis lb 16 16½
Amyl acetate ex pentane reg., dms. c.l. divd lb. 19 —
dms c.l divd lb 21½ —
tanks divd lb 16½- —
tech dms c.l divd lb 17 —
dms t.c.l. divd lb 18½ —
tanks divd lb 14½ —
Amyl acetate syn oxo process, dms., c.l. divd lb. .19 —
dms. c.l. divd lb. 20½ —
tanks divd lb 16½ —
Amyl alcohol ex fusel oil (see Fusel oil refd).
Amyl alcohol ferment refd., 128-132°C., dms t.c.l divd lb. 43½ —
refd. ACS grade dms., t.c.l., divd lb. 45½ —
ex pentane mixed amyls, dms., c.l. frt alld lb. .19 —
dms. t.c.l. frt alld lb. 20½- —
tanks frt alld lb 16½- —
Amyl alcohol primary dms., c.l., frt alld lb 20¼ —
dms. t.c.l. frt alld lb .21¾ —
tanks, frt alld lb. 17¾ —
Sec-synthetic dms c.l. works, frt alld lb .19 —
dms. t.c.l. same basis lb 20½- —
tanks same basis lb 17 —
Tert-synthetic dms c.l. frt. alld E lb 17 —
dms. t.c.l. frt. alld E lb 18½- —
tanks frt alld E lb 14½- —
Amyl alcohol 1-pentanol (syn normal), dms. c.l. works lb 41¼ —
dms t.c.l works lb 43 —
tanks works lb 39½- —
3-pentanol, dms. c.l.. works lb 65 —
dms t.c.l. works lb 70 —
nks works lb 60 —
Amyl n-butyrate dms lb 1.00 1 25
Amyl cinnamic aldehyde dms lb 1 70 2 20
p-tert Amyl phenol dms. c.l. works, lb. .28 - —
dms., t.c.l., works lb. .29 - —
Amyl salicylate cns. dms lb 71 - —
Amyris oil, dms lb 1.50 - —
Anethol, tech., dms. lb. .80 - .92
USP. cns., dms. lb. 1.05 - —
Angelica root, bls lb. .50 - 1.00
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline dms., c.l., frt. alld lb. .20 - —
dms., t.c.l., frt. alld. lb. .21 - —
tanks, frt alld. lb. .18 - —
Aniline oil (see Aniline).
Aniline salt dms., c.l. t.l., 20,000 lbs min., frt alld lb. .33 - —
dms., t.c.l., same basis lb. .35 - —
Anise oil, USP, dms lb. 1.90 - 3.00
Anise seed, Turkish, bgs lb. .24 - —
Spanish, bgs. lb. .28 - —
Anisic aldehyde, dms lb 1.50 2.20
o-Anisidine, dms. c.l., frt. alld lb .80 —
dms. t.c.l. same basis lb .82 - —
tanks same basis lb .78 - —
p-Anisidine, dms., works lb .97 - —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b. works lb. .42½- —
dms. t.c.l., minimum shipment 1,000 lbs., same basis lb .45 - —
Anthranilic acid, 99% 150-lb dms., dlvd lb 1.15 - —
Anthraquinone, 99.5% bgs., c.l., frt alld lb. .70 - —
bbls., t.c.l., same basis lb. 73 - —
Electrical grade bgs. t.c.l., same basis lb 1.10 —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines, lb .29 —
cs. c.l., mines lb 29½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .26½- —
bgs. t.c.l., frt alld. lb. .28 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx 65%, bgs., 10,000-lb lots, dlvd lb. .23 —
bgs. smaller lots, dlvd lb .24 .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. 41 —
pails, t.c.l. works lb 43 —
Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E lb. .69½- —
USP powd. 250-lb dm same basis lb 74½- —
Apomorphine hydrochloride, USP bots., 25-oz lots oz.35 60 —
Apricot kernel oil, USP, dms lb 55 70
Arabic gum amber sorts, 10 bgs. lb. .21 - .23
USP, powd., bbls lb. .27 - .30
Areca nuts, powd. bbls. lb 13 - —
Arecoline hydrobromide, NF, bots., tins, 100 oz or more oz 4.00 - —
l-Arginine free base, dms. 10-kilo lots or more kilo.90 00 - —
l-Arginine glutamate dms. 10-kilo lots or more kilo.64.80 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60 00 —
Arnica flowers (true Montana), bls lb .75 —
Aromatic petroleum solvents (see Solvent Naphtha petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 —
bbls., c.l., works lb. .0.31 —
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b works lb. .48 —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., t.c.l. works lb .06½- .07½
Arsenous acid, tech (see Arsenic, white)
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb 3.70 —
Light shades, bbls. lb 2.85 - —
Asafetida gum, cns lb. .36 - .40
Powd. bbls., dms lb .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l (30 tons), mines ton.80 00 - —
7D c.l (30 tons), mines ton 75 00 - —
7F, c.l (30 tons), mines ton 71 00 - —
7H, c.l (30 tons), mines ton 61 00 - —
7K, c.l (30 tons), mines ton 50 00 - —
7M, c.l (30 tons) mines ton 44 00 - —
7R, c.l, (30 tons), mines ton 43 00 - —
7RF c.l (30 tons) mines ton 44 00 - —
7T, c.l, (30 tons), mines ton 41 00 - —
7TF c.l (30 tons) mines ton 44 00 - —
Asbestos prices are in Canadian funds; t.c.l lots $4 per ton higher
Ascorbic acid, USP dms. 100-kilos. kilo. 6.80 - —
dms., less than 100-kilos kilo. 7.05 - 7.80
Ash black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.43.00 - —
ex-whse, 5 tons or more, N. Y., N J ton.89 50 - —
select, brilliant black, 340°-360°F fusing pt., bgs., c.l., mines, ton.46.00 - —
270°-295°F fusing pt., bgs., c.l., mines ton.43.00 —
Asphalt, petroleum, cut-back, tanks, tankwagon, refy gal. .09½- —
emulsion tanks tankwagon refy gal 09½- —
steam refd. 50-80 penetration, tanks, tankwagon, refy ton.21 00 —
85-300 penetration, tanks, tankwagon, refy ton.20 00 —
Aspirin (see Acetylsalicylic Acid)
Atropine, NF, tins oz 6.50 - 7.50
Atropine sulfate USP bots oz 5.25 5.75
Azelaic acid, bgs. c.l., divd. lb 40 —
bgs. ton lots same basis lb 41 —

B

Bacitracin, sterile, over 500,000,000 units/g., 50,000 units, .90 - —
non-sterile, over 500,000,000 units, 40,000 units, .65 - —
Balm of Gilead buds, dried bgs lb 1.25 1.35
Barberry root bark, bgs lb 1 00 1.10
Barbital, NF 100-lb dms, f.o.b. works lb 4.50 —
Barbital sodium NF 100-lb dms. lb 4.75 —
Barium carbonate precip., bgs. c.l., works ton 111.50 —
bgs. smaller lots, works ton 126 50 —
Barium chlorate, dms. works lb .32 41
Barium chloride, anhyd. bgs. c.l., works ton.176.00 —
bgs. t.c.l., works ton 196.00 —
NF, cryst., dms., 400-lbs., works lb 23 —
Tech cryst. bgs c.l. works 100 lbs 7.00 —
bgs. t.c.l. works 100 lbs 8.00 —
Barium chromate, bgs. frt. equald. lb .38 —
Barium dioxide (see Barium peroxide)
Barium hydrate, cryst. bgs. c.l. t.l., frt. equald ton.208 00 —
bgs. t.c.l., t.l. frt equald ton.218.00 —
Barium monohydrate, 99% bgs. c.l. frt equald 100 lbs.11 25 —
bgs. t.c.l. frt equald 100 lbs.11.75 —
Barium monoxide (see Barium oxide)
Barium nitrate, bbls. c.l., t.l. dlvd lb 16 —
bbls. t.c.l., t.l., dlvd lb 17 —
Barium oxide, grd., dms., c.l., t.l., frt equald ton.275.00 - —
dms., t.c.l., t.l. frt equald ton.285.00 - —
Barium peroxide, dms. frt. equald. lb .20 - —
Barium stearate, ctns. c.l., frt. alld. lb .41 - —
ctns., t.c.l., same basis lb. .42 .46
Barium sulfate, tech (see Barytes and blanc fixe)
Barium sulfate, X-ray, 100-lb dm. dm. lb. .19 - —
Barium sulfide, dms., c.l., works ton.100.00 —
dms., t.c.l., works ton.110 00 —
Barytes, southern off-color, bgs. mines ton 30 00 - —
95-75% bgs., mines ton.30 00 - —
white water-grd paper bgs. c.l St. Louis ton.60.00 -60.25
paper bgs. ex whse New York ton 84.85 —
Battery acid, cbys., c.l., works f.o.b. 100 lbs 2.35 —
cbys, t.c.l., works, E 100 lbs 2.65 -10.95
Bauxite, bulk, mines ton 7.00 -10.00
Bay oil NF Puerto Rican 50-55% cns lb. 3.25 - —
55-60%, cns. lb. 3.60 - —
NF, West Indian, 50-55% cns. dms lb. 3.75 - —
Bayberry wax, bgs lb 65 70
Beeswax, crude, African, bgs lb. .54 - .55
Brazilian, bgs lb. .58 - .59
Central American, bgs. lb. .57 - .58
Chilean, bgs lb. .59 Nom
Refd USP bleached white, bricks 100-lb ctns lb. .67 .69
white, slabs, 100-lb ctns lb. .66 - .68
yellow, bricks, 100-lb ctns lb 59 .61
yellow, slabs, 100-lb ctns lb 58 .60
Belladonna leaf, bls. lb. .24 .26
Belladonna root, bls lb. .35 - .38
Bentonite, dom 200 mesh, bgs., c.l., mines ton.14.00 - —
Imp. Italian, white, high gel., bgs., 5-ton lots ex whse ton.95.20 - —
bgs., 1-ton lots, ex whse ton.99 00 - —
Imp. Italian, white, low gel., bgs., 5-ton lots, ex whse ton.93.40 - —
bgs., 1-ton lots ex whse ton.97 16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms lb. .74 - —
Tech., dms., c.l., t.l. lb. .42 - —
dms., t.c.l. lb. .44 - —
Benzene, pure or nitration, tanks, works:
Baton Rouge, La gal. .34 - —
Bethlehem, Pa gal. .34 - —
Birmingham district gal. .34 - —
Chicago district gal. .34 - —
Cleveland district gal. .34 - —
Geneva, Utah gal. .34 —
Houston, Tex. gal. .34 - .40
Johnstown, Pa gal. .34 - —
Benzene, pure or nitration, tanks, works:
Lorain, Ohio gal. .34 - —
Middletown, Ohio gal. .34 - —
Mennequa, Colo. gal. .34 - —
Philadelphia district gal. .34 - —
Pittsburgh district gal. .34 - —
Port Arthur, Tex. gal. .34 - —
Benzene, pure or nitration, tanks, works:
St. Louis, Mo. District gal. .34 - —
Syracuse, N. Y. gal. .34 - —
Terre Haute, Ind gal. .34 - —
Youngstown, Ohio gal. .34 - —
Lackawanna, N. Y. gal. .34 - —
Lone Star, Tex gal. .34 - —
Benzene hexachloride 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l. t.l., consignment, dlvd. gamma-unit, .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit, .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., t.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls., dlvd. lb. 2.20 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb. 3.40 - —
Benzocaine, dms., 100-lbs., frt alld. lb. 3.25 - —
Benzoic acid, tech., dms., c.l., t.l., frt. alld lb. .25 - .37
dms., t.l.l., same basis lb. .29 - .41
tanks, same basis lb. .21 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb lots lb. .50 —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra, cs. lb. .32 —
Benzophenone, dms lb. 1.35 - 1.40
Benzotriazole, tech dms., 1,000-lb lots, works lb. 1.95 - —
Benzotrichloride, cbys., 500-lb lots or more, frt equald. lb. .21 - —
cbys., smaller lots, frt. equald lb. .23 - —
Benzoyl chloride, cbys. dms., c.l., works, frt. equald lb. .22 - —
cbys., t.c.l., same basis lb .23 - —
tanktrucks, dlvd Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb lots works lb. 98 1.08
Benzyl acetate, f.f.c. cns. dms lb. .54 - —
Benzyl alcohol, NF, dms lb. .54 - —
Tech. dms dlvd. lb. 47½- .65
Benzyl benzoate, USP, 40-lb dms. lb. .62 - —
Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald lb. .23 - —
dms., t.c.l., same basis lb. .24 - —
tanktrucks, dlvd., Metropolitan area lb. .21 - —
Benzyl cinnamate cns. lb 3.30 3.60
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.23 - —
12-49 dms. same basis lb. 1.35 - —
1-11 dms. same basis lb. 1.90 - —
Benzyl formate, cns. lb. 1.70 - 1.85
Benzyl isoeugenol, cns lb. 8.20 - 8.30
Benzyl propionate, bots lb. 1.30 - 1.35
Benzyl salicylate, bots lb. 1.50 - 1.85
Benzylidine acetone, bots lb. 1.65 - 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate cns lb.56.50 - —
Berberine hydrochloride, bots lb.56.50 - —
Bergamot oil nat. NF Italian, cns. lb.11.00 -12.00
Betagammapicoline (see b.g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine)
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see n-Phenylethylamine)
BHC (see Benzene hexachloride tech.).
Biotin cryst bots gram.10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil crude cns lb. 1.50 1.90
Rectified, cns. lb. 1.75 2.00
Bismuth chloride, lars lb 5.11 - —
Bismuth hydroxide, dms lb 4.60 4.68
Bismuth metal, bxs, ton lots lb. 2.25 —
Bismuth nitrate, cryst., 200-lb. dm. lb. 2.25 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.92 - —
Bismuth subcarbonate, USP, 25-lb. dm., f.o.b., works lb. 3.70 - —
Bismuth subgallate NF 200-lb dm. f.o.b works lb 3.98 - —
Bismuth subiodide fib dms lb 5.37 - —
Bismuth subnitrate NF 200-lb dm. f.o.b., works lb. 3.10 - —
Bismuth subsalicylate USP 100-lb dm., f.o.b works lb. 4.15 - —
Bismuth trioxide 100-lb dms., f.o.b works lb. 4.40 - —
Bismuth-ammonium citrate USP, powd., jars lb 4.22 —
Bisphenol-A bgs. c.l. t.l. single shipt. 70,000-lbs or more, frt. equald lb. .30½- —
bgs. c.l. t.l. less than 40,000 lbs., same basis lb. .31 - —
bgs., t.c.l., same basis lb. .32½- —
Blackberry root bark, bls lb 50 .55

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, aceylene, may be found in the A's under Acetylene black

Blanc fixe direct process, bgs. c.l. works ton 160 00 —
bgs., t.c.l., works ton 170 00 —
bgs., t.c.l., New York whse ton 180 00 —
Blood dried 16-16½% ammonia, bgs., New York unit-ton 5.50 —
Bloodroot, bls lb 85 .90

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil Brazilian, dms lb 2.05 —
Peruvian dms lb 1.65 —
BON acid maroons pure bbls lb 1.75 —
Resinated bbls lb 1.50 —
Bone black, dms, c.l., frt. alld lb .1750- .2225
t.c.l. works lb .1950- .2425
Pacific coast bone black prices 3¼c. per lb higher
Bonemeal, steamed works E ton 80.00 - —
Bone phosphate defluorinated or lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate tribasic)
Borax, tech anhyd 99½%, bgs. c.l. works ton 92 00 - —
bgs. ton lots, ex whse New York or Chicago 100 lbs. 7.67 - —
bgs. smaller lots same basis 100 lbs. 8.91 -10.91
bulk c.l. works ton 85 00 —
Borax, tech., gran. decahydrate, 99½% bgs. c.l. works ton.50.00 - —
bgs. ton lots ex whse New York or Chicago 100 lbs. 5.31 - —
bgs. smaller lots same basis 100 lbs. 6.56 - 8.56
bulk c.l. works ton 45 50 —
pentahydrate, 99½%, bgs., c.l. works ton.64.50 —
bgs. ton lots ex whse, New York or Chicago 100 lbs. 6.12 - —
bgs. smaller lots same basis 100 lbs. 7.37 - 9.37
bulk c.l. works ton.58 00 —
USP powd. bgs c.l works ton.54 00 —
bgs ton lots ex whse New York or Chicago 100 lbs. 6.57 - —
bgs. smaller lots same basis 100 lbs. 7.82 - 9.82
Bordeaux powder tribasic bgs. c.l., dlvd lb. .24 —
bgs. t.c.l., same basis lb .26 —
Boric acid, tech. anhyd 99.9% bgs., c.l. works ton.335 00 - —
bgs. ton lots ex whse, New York or Chicago 100 lbs.21.27 - —
bgs. smaller lots same basis 100 lbs.22.52 -24.52
cryst. 99.9% bgs. c.l. works ton.163.50 —
bgs. ton lots ex whse, New York or Chicago 100 lbs.11.67 - —
bgs. smaller lots, same basis 100 lbs.12.92 -14.92
Boric acid, tech., cryst., 99.9% dms., c.l., works ton.188.50 —
dms., ton lots, ex whse. New York or Chicago 100 lbs.13.17 - —
dms., smaller lots, same basis 100 lbs.14.42 - —
Boric acid, gran. 99.9%, bgs., c.l., works ton.112.00 - —
bgs. ton lots ex whse New York or Chicago 100 lbs. 8.78 - —
bgs smaller lots, same basis 100 lbs.10.03 -12.03
dms. c.l. works ton.137 00 —
dms., ton lots, ex whse, New York or Chicago 100 lbs.10.29 - —
dms smaller lots same basis 100 lbs.11.54 - —
bulk, c.l. works ton.106.00 —
powd., bgs., ton lots, ex whse. New York or Chicago 100 lbs. 9.20 - —
bgs. smaller lots same basis 100 lbs.10.45 -12.45
dms., ton lots, ex whse., New York or Chicago 100 lbs.10.71 - —
dms., smaller lots, same basis. 100 lbs.11.96 - —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 - —
Boron trichloride, CP 1,800-lb. cyls., works lb. 1.25 - —
100-lb cyls. works lb. 1.70 - —
Boron trifluoride gas, cyls., t.l., works lb. 70 - —
cyls., t.t.l. works lb. 70 - —
Brimstone (see Sulfur).
Broenner's acid bbls lb. 1.53 - —
Bromine purif. cs. c.l., t.l., dlvd. E of Rockies lb. .32 - —
cs., t.c.l., same basis lb. .34 - .39
ret dms. c.l., t.l. dlvd. E of Rockies lb. .31 —
ret. dms. t.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½- —
Bromochloromethane dms., c.l., frt. equald lb. .48 —
dms. t.c.l., same basis lb. .50 —
tanks same basis lb. .47 —
Bromoform, pharmaceutical grade, 5-gal. cby., frt. equald lb. 1.95 - —
Bromstyrol, bots lb. 5.25 5.35
Brucine cns oz. Nominal.
Brucine sulfate, NF, cns. oz. 1.45 - 1.75
Buchu leaves, bbls. lb. .70 .75

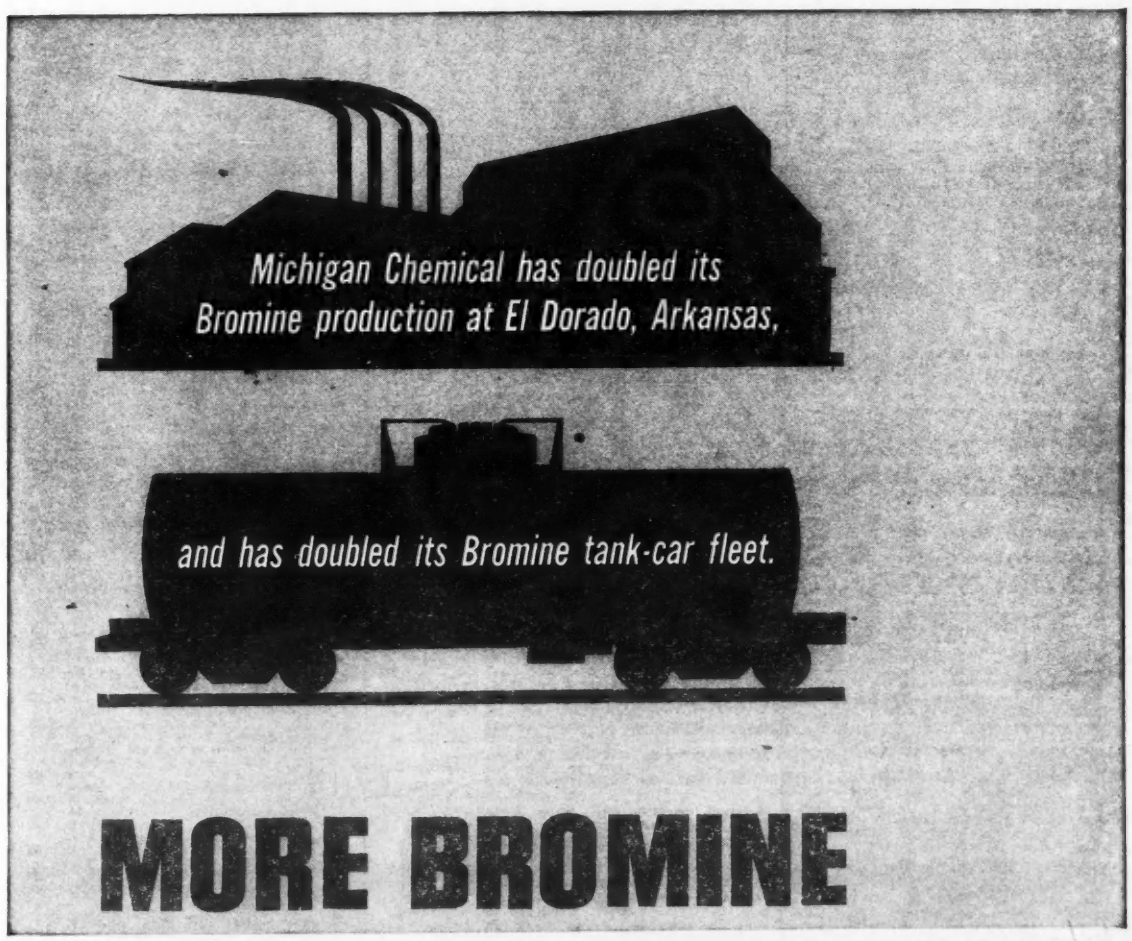
BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown

Butadiene refd cyls., c.l., refy lb .21 - —
cyls., l.c.l., refy lb .22 - —
tanks, dlvd lb .12¾- —
Butene-1, tanks works lb .0625- —
Butene-2, tanks works lb .0570- —
n-Butyl acetate ferment, dms., c.l., frt. alld lb .17 —
dms., l.c.l., same basis lb .18½- —
tanks, same basis lb .14½- —
Syn. dms c.l., dlvd E lb .17 —
dms., l.c.l. same basis lb .18½- —
tanks, same basis lb .14½- —
sec-Butyl acetate syn. dms., c.l., dlvd E lb .14¾- —
dms., l.c.l., same basis lb .16¼- —
tanks, same basis lb .12¼- —
n-Butyl acrylate, dms. c.l. or t.l., straight or mixed frt. alld. E lb .37½- —
dms., l.t.l., same basis lb .38½- —
tanks, same basis lb .35 - —
n-Butyl alcohol ferment, dms., c.l., frt alld lb .18 —
dms., l.c.l. frt alld lb .19½- —
tanks, frt. alld lb .15½- —
n-Butyl alcohol syn. dms., c.l., dlvd lb .18 —
dms., l.c.l., frt alld lb .19½- —
tanks, dlvd lb .15¼- —
Sec-synthetic dms., c.l., dlvd lb .15 —
dms., l.c.l., dlvd lb .16½- —
tanks, dlvd lb .12½- —
n-Butyl alcohol, tert-synthetic, dms., c.l. frt alld. dlvd E lb .16 —
dms., l.c.l same basis lb .17½- —
tanks, same basis lb .13½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride dms., c.l., works lb .37½- —
dms., l.c.l. works lb .38¼- —
n-Butyl ether dms., c.l., works lb .35¼- —
dms., l.c.l., works lb .36 - —
tanks, works lb .33¼- —
Butyl lactate dms. c.l. frt. alld. E. Rockies lb .42½- —
dms., l.c.l. same basis lb .43½- —
tanks, same basis lb .40 - —
Butyl laurate, dms., works lb .37½- —
Butyl methacrylate dms., c.l., t.l., works lb .55 —
dms. l.c.l. works lb .55½- —
Butyl oleate refd. dms., l.c.l., works lb .32 —
Butyl phenylacetate, dms lb 4.50 4.60
Butyl phthalate (see Dibutyl phthalate)
Butyl stearate dms c.l. frt alld. E of Rockies lb .27¼- —
dms. l.c.l., same basis lb .28¼- —
Butylamine (see Mono- Di- and Tri-butylamine).
tert-Butylamine dms. c.l., t.l., t.o.b. works lb .47 - —
dms., l.c.l., same basis lb .47½- —
tc., t.t., same basis lb .45 - —
Butylated hydroxyanisole, food grade dms dlvd. lb 4.75 - —
6-tert-Butyl m cresol (see Mono-tert-butyl m cresol)
Butylated hydroxytoluene (see 2,6-Di-tert butyl-p cresol).
1,3 Butylene glycol dms. c.l., t.l., dlvd lb .20½- —
dms., l.c.l., t.t., t.o.b. works lb .22 - —
tanks, dlvd lb .18 - —
p-tert-Butylphenol bgs., c.l., dlvd., lb .27½- —
bgs., l.c.l. works lb .28½- —
Butyraldehyde dms., c.l., dlvd lb .22 —
dms., l.c.l., dlvd lb .23½- —
tanks dlvd lb .19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb .34 - —
dms., l.c.l. same basis lb .34½- —
tanks, same basis lb .32½- —
Butyric ether (see Ethyl butyrate)
Butyrolactone dms. c.l. t.l., works, lb .40 - —
dms l.c.l. same basis lb .42 - —
n-Butyronitrile, dms., c.l., dlvd lb .56½- —
dms., l.c.l., dlvd. lb .57½- —
tanks, dlvd lb .54 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP red dark shade, bbls., frt alld E of Rockies lb 5.55 - —
Light shade, bbls., same basis lb 4.65 - —
medium shade, bbls., same basis, lb 5.30 - —
Medium light shade, bbls., same basis lb 4.90 - —
Orange-red shade, bbls., same basis lb 4.30 - —
Yellow all shades, bbls, frt alld E. of Rockies lb 2.93 - —
Cadmium chloride, 400-lb. dms., f.o.b. shipping point lb 1.49 - —
Cadmium iodide 25-lb fib dms lb 6.75 7.00
Cadmium metal, rounds or sticks, ton lots, cs., dlvd lb 1.60 - —
Cadmium nitr., purif. cryst., 400-lb. dms., less than 5,000 lbs., f.o.b. shipping point, lb .89 - —
400-lb. dms., 5,000 lbs. or more, same basis lb .87 - —
Cadmium-mercury lithopone orange, deep shade bbls frt alld E of Rockies lb 1.70 - —
Cadmium-mercury lithopone red, dark shade, bbls same basis lb 2.00 - —
Red, light shade bbls., same basis lb 1.77 - —
Red, medium shade, bbls., same basis lb 1.92 - —
Red, medium light shade bbls., same basis lb 1.85 - —
Red, maroon shade bbls same basis lb 2.08 - —
Cadmium-selenide lithopone maroon, bbls frt alld E of Rockies lb 2.81 - —
Orange, bbls., same basis lb 1.63 - —
Cadmium-selenide lithopone red, orange-red shade bbls., same basis lb 1.77 - —
Red, dark shade bbls same basis lb 2.61 - —
Red, light shade, bbls., same basis lb 1.63 - —
Red, medium shade, bbls, same basis lb 2.23 - —
Red, medium-light shade bbls, same basis lb 2.05 - —
Cadmium-selenide, lithopone, yellow, all shades bbls frt alld E. of Rockies lb 1.24 - —
Caffeine NF citrated dms 100-lb. lots or more lb 2.70 - —
USP nat cryst anhyd., dms., 100-lb lots or more lb 2.10 - —
Caffeine, USP nat. cryst. hydrous, dms. 100-lb lots or more lb 1.96 - —
USP, nat., cryst., anhyd., powd., dms., 100-lb. lots or more, frt. alld lb 2.10 - —
hydrous, powd., 150-lb. dms., frt. alld. lb 1.96 - —
Cajuput oil, native cns. lb 1.75 2.00
Redist. USP cns lb 1.90 2.10
Calamine USP dms lb .34 —
Calamus oil bots lb 12.00 20.00
Calciferol cryst. 10-kilo or more lots, works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib dms 100 lbs or more frt. adjusted lb 3.10 - —
Calcium bromide NF jars, 100 lbs. or more lb 1.10 - —
Calcium carbide standard generator size, 600-lb dms. c.l., dlvd ton 149.00 - —
Calcium carbonate, nat., dry grd., air floated, 325 mesh, bgs. c.l. works ton 10.50 - —
Calcium carbonate, chalk, whiting, 325 mesh bgs c.l. works ton 32.00 -34.00
water-grd. ½ to 10 microns, bgs., c.l. works ton 30.00 —
10 to 20 microns bgs. c.l., works ton 17.00 -18.00
Calcium carbonate, precip., dense, bgs., c.l., works ton 30.00 -38.50
bgs. l.c.l., works ton 45.00 -53.50
medium bgs. c.l. works ton 38.00 —
bgs. l.c.l works ton 48.00 -53.00
Calcium carbonate, surface treated, bgs. c.l., works ton 42.00 -44.00
bgs., l.c.l. works ton 57.00 -59.00
ultrafine bgs. c.l. works ton 117.50 167.50
bgs l.c.l. works ton 137.50 -187.50
Calcium chloride conc flake or pellet 94-97% paper bgs., c.l. works frt equald ton 39.30 - —
Flake, 77-80%, paper bgs., c.l., works, frt equald ton 32.00 - —
Liquor, 40%, tanks frt equald ton 12.50 - —
Powd., 77% min., paper bgs. c.l., works, frt equald ton 37.00 - —
Purif., gran dms lb .27 —
Calcium chloride, solid, 73-75%, dms., c.l., frt. equald ton 30.50 - —
dms., l.c.l. works frt equald. ton 38.00 -73.00
USP gran. dms. lb .32 —
Calcium chromate, bgs., dlvd lb .37 - —
Calcium cyclamate, 100-lb. dms lb 1.95 - —
Calcium gluconate, USP, AA grade, 100-lb dm., ton lb 73½- —
USP powd. 100-lb dm. ton lb .66½- —
Calcium hydride lump, dms. works, lb 2.20 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., dlvd E. of Rockies cs. 23.85 -25.60
100-lb dms. same basis dm. 33.30 -36.55
Calcium hypophosphite, dms, 1,000-lb lots lb 1.28 - —
Calcium iodide, 25-lb. jars, works, lb 4.27 - —
Calcium lactate NF, dms., t.o.b. works lb .43 - .46
Calcium mandelate, USP, 150-lb. dm., works lb 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb .30 - —
Calcium pantothenate, USP, jars, 1 kilo or more kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms lb 1.24 1.25
Calcium phosphate, dibasic, USP, bgs. c.l. frt equald 100 lbs. 16.00 - —
Dibasic feed grade, 18½% P, bgs., c.l., t.l., Bonnie, Fla., frt. equald ton 81.00 - —
bgs. c.l., t.l., f.o.b. Texas City works ton 75.50 - —
bgs., l.c.l., ton 96.00 - —
Calcium phosphate, dibasic, feed grade, 21% P., bgs. c.l., t.l., frt. equald ton 97.65 —
bgs., l.c.l. frt equald ton 107.65 —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices
Calcium phosphate monobasic, bgs., 10,000-lb lots, frt equald 100 lbs 7.45 —
bgs., smaller lots, same basis 100 lbs 7.95 —
Tribasic, NF, precip. bgs., c.l., works, frt equald 100 lbs 9.25 —
bgs. l.c.l. frt equald 100 lbs 10.00 —
Calcium propionate, any quantity dms. dlvd E of Rockies lb .37 - —
Prices W of Rockies 3c per lb more
Calcium phytate bgs. 50 lbs or more f.o.b. warehouse N.Y. lb .39 —
Calcium resinate, precip. dms., frt. alld., works lb .45 —
Calcium silicate hydrated bgs. c.l., works lb .06 —
bgs. l.c.l., works lb .06½- —
Calcium silicate paint grade (see Wollastonite)
Calcium stearate etns. c.l. lb .39 —
etns., l.c.l. lb .40 .44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Bromine production at El Dorado, Arkansas,
and has doubled its Bromine tank-car fleet.
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With the placing on stream in August of new facilities at the Michigan Chemical Corporation — Murphy Corporation bromine plant near El Dorado, Arkansas, there now is available an added supply of bromine for your normal requirements, your immediate peak demands, and your plans for increased bromine usage. And because of our enlarged tank-car facilities you can be sure that your delivery schedule can be met.

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999 North Bankson Street, Saint Louis, Michigan
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Calomel NF mild, powd., dms., 100-lbs., f.o.b works lb 4.32 - —
NF mild, precip., dms., 100-lbs., f.o.b works lb 5.67 - —
Camphene 46° m.p., dms incl., c.l., works lb .15 - —
dms, incl., t.c.l. same basis lb .16½- —
tanks, same basis lb .12½- —
Camphene chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb 3.63 3.70
Camphor, syn. tech., 1 bbl or more, lb .45 - —
USP, gran., powd. bbls., 1,000-lb lots lb .53 - —
bbls smaller lots lb .54 - —
tablets, ctns., 1,000-lb. lots, lb .80 - —
ctns., 500-lb. lots lb .81 - —
ctns., smaller lots lb .82 - —
Camphor oil, sassafrassy, dms. lb .35 .55
White, dms. lb .26 .50
Cananga oil, native, cns. lb 5.00 6.50
Rectified, cns lb 7.25 10.00
Candelilla wax, crude, bgs lb .57 - .58
Refd., pure, bgs lb .62 - .63
Powdered Candelilla wax 20 to 100 mesh 8c higher
Cantharides, Chinese, cs. lb 1.00 —
powd. bgs lb 1.15 —
Russian bgs. lb 2.00 2.15
powd. bgs. lb 2.15 2.30
Capric acid, dms lb .27¼- .29¾
tanks lb .24¾- —
Caprolatam monomer, bgs., c.l., t.l., f.o.b works lb .52 - —
bgs., l.c.l., t.t.l. same basis lb .57 - —
tanks, same basis lb .49 - —
Caprylic alcohol 85% dms, c.l., t.l., works lb .19 —
dms., t.t.l. same basis lb .19½- —
tanks, frt equald lb 16½- —
Sec. 92-99% dms. c.l. f.o.b. works lb .22 —
dms. l.c.l. f.o.b. works lb .23 —
tanks, f o b works lb 19½- —
Caprylic acid, dms lb .27¼- .29¾
tanks lb .24¾- —
Capsicum (see Pepper red)
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin NF from dom pepper, dms lb 4.00 - —
NF from African pepper, dms lb 4.50 - —
Caraway oil, NF, dms lb 3.75 - —
Caraway seed Danish, bgs. lb .16 —
Dutch, bgs. lb .19 - —
Carbazole 97%, bbls. ton lots, works lb 1.05 - —
Carbon black, channel, rubber heads bulk, c.l., works lb .08 —
bgs c.l. works lb .08½- —
bgs. l.c.l. works lb 16¼ —
Carbon black, furnace, fast extruding, bgs., c.l., works lb .06¾- —
ctns. l.c.l. whse lb .13½ —
Carbon black high abrasion, bulk, c.l. works lb .07¼ —
bgs. c.l., works lb .07¾- —
bgs l.c.l. dlvd or whse lb .14½ —
high modulus bgs. c.l. works, lb .06¼- —
ctns. l.c.l. whse lb .13 —
semi-reinforcing bgs., c.l., works lb .05¾ —
bgs. ctns., l.c.l., whse lb 12½- —
Carbon black, pigment, high color beads, ctns., c.l., works lb .78 - —
ctns l.c.l., dlvd or whse lb .87 —
medium color uncompressed, bgs. c.l., works lb .14 —
bgs., l.c.l. dlvd or whse lb .22½- —
Carbon dioxide, indust. wholesale, bulk, 30,000-2,999,999 lbs., dlvd Metropolitan areas, E ton 60.00 -115.00
bulk, 3,000,000 lbs or more, dlvd Metropolitan areas E ton 55.00 - —
Solid, bulk, wholesale works ton 85.00 - —
Carbon disulfide, 55-gal dms, c.l., works, frt equald to competitive points lb .071 —
55-gal dms, l.c.l. same basis lb .086 .091
5-gal dms, 30 dms to c.l., same basis lb .131 —
5-gal dms, less than 30 dms., same basis lb .161 —
tanks dlvd lb .0520- —
Carbon tetrachloride CP consumers dms c.l. frt alld, lb .12¾- —
dms, t.c.l. frt alld lb .15¼ —
Tech. consumers dms, c.l., t.l., frt alld lb .11¾ —
dms, t.c.l. t.t.l. frt alld lb .14¼ —
tanks, frt alld lb .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal NF dms, 100-lb lots, works lb 4.00 4.25
dms smaller lots, works lb 4.10 4.75
Cardamom oil, NF, bots lb 43.00 45.00
Cardamom seed, bleached "A" lb 3.45 —
Bleached "B" lb 3.15 - —
Decorticated Alleppey, cs. lb 2.70 - —
Guatemala, cs. lb 2.10 - —
Green, Alleppey, bgs lb 2.10 - —
Ceylon, bgs. lb 2.10 - —
Carmine No 40, NF bulk 100-lb lots or more dlvd. lb 16.80 —
bulk smaller lots, dlvd lb 16.90 -17.30
Carnauba wax, chalky, bgs., ton lots, lb .70 Nom.
North Country, No 2, crude, bgs., ton lots lb .78 - .80
refd., pure, ton lots lb .85 - .87
North Country, No 3, Ceara, crude, ton lots lb .64 - .65
North Country, No 3, Ceara, yellow, crude, ton lots lb .66 - .67
No. 3, refd., pure, bgs., ton lo lb .74 - .76
No. 1, Ceara, yellow, bgs., ton lo lb .94 - .96
Parnahyba, yellow, bgs., ton lots, lb .96 - .98
Powdered carnauba wax, 20 to 100 mesh 8c over lb higher
Carotene tech 1,350,000 A units per gram tins, 5-10 kilo lots, dlvd gram .20¼ —
in carrot oil, 3,000,000 to 8,000,000 A units per lb. dms., works million units .12 —
USP microcrystalline in oil, 400,000 A units per gram., dms, dlvd million units .144 —
b-Carotene in vegetable oil semi-solid suspension 400,000 A units per gram cns kilo 57.60 - —
b-Carotene, liquid in vegetable oil, 500,000 A units per gram cns kilo 72.60 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram cns kilo 240.00 —
Carvol, bots lb 5.00 5.40
Cascara sagrada bark bulk lb .32 —

Casein, dom., edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works lb .56 - —
edible, acid precip., 80 mesh, bgs. 10,000-lb lots or more, works lb .64 - —
Imp., inedible, acid-precip., gro., Argentine, bgs., c.l., ex-dock Eastern seaports lb .16¾- .17¼
Australian, bgs., c.l., same basis lb .19¼- .19¾
New Zealand, same basis lb .24 - .25
Cashewnut shell, liquid, treated, dms., c.l., Newark, N.J lb .24 - —
dms, ton lots, same basis lb .25 - —
t.w., same basis lb .22½- —
Cassella acid dms, frt. alld., 100% basis lb 1.44 1.75
Cassia oil, redist., USP, cns lb 7.50 9.00
Cassia, Padang, "A," bls lb .31 - —
"B," bls. lb .30 - —
"C," bls. lb .29 - —
Korintje "A," bls lb .29 - —
"B," bls. lb .28 - —
"C," bls. lb .27 - —
Castor oil, dom., blown, dms., c.l. lb .2550- —
dms., t.c.l. lb .2650- —
Castor oil dom. dehydrated, bodied, dms., c.l lb .2700- —
dms., t.c.l. lb .2850- —
tanks lb .2500- —
dehydrated, unbodied, dms., c.l. lb .2500- —
dms., t.c.l. lb .2660- —
tanks lb .2360- —
hydrogenated, bgs., c.l. lb .2475- —
bgs., ton lots lb .2875- —
bgs., l.c.l., dlvd lb .3075- —
dom., raw, No. 1, dms., c.l. lb .2200- —
dms., t.c.l lb .2300- —
tanks lb .2000- —
No. 3, tech., dms., c.l. lb .2125- —
dms, c.l., lb .2225- —
tanks lb .1925- —
Refd. deod dms., c.l. lb .2650- —
dms., t.c.l. lb .2750- —
tanks lb .2450- —
USP, dms., c.l. lb .2350- —
dms., t.c.l lb .2450- —
tanks lb .2150- —
Imported, No. 1, Braz., tanks lb .17½- —
Sulfonated, 50%, dms., works lb .15 .15½
75%, dms works lb .19 .19½
Castor oil acids, dehydrated, dms. lb .41¼- .43¼
Split, dms. lb .33¾- .34¾
Castor pomace, bgs., c.l., works ton 35.00 —
Castoreum nat., cns. lb 5.25 - —
Syn., cns lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb 2.17½- —
Resub., dms. works lb 4.29½ —
Catnip leaves, Southern, bls lb. Nominal
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic)
Cedarleaf oil USP XIII cns., dms. lb 3.25 3.50
Cedarwood oil cns., dms. lb 1.00 - —
Celery seed, French, bgs lb .36 - —
Indian, bgs. lb .21 - —
Cellulose acetate, flake, powd., bgs., t.l., dlvd E lb .36 .51
Cellulose acetate butyrate powd., 17% butyryl content, bgs., dlvd E lb .545 .555
27% butyryl content, bgs dlvd, E lb .595 .605
38% butyryl content, bgs, dlvd, E lb .545 .555
38% butyryl content, half-second, bgs., dlvd E lb .545 .555
50% butyryl content, bgs, dlvd, E lb .585 .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure, high vis., bgs., 23,000-lb lots or more works, frt alld lb .57 - —
bgs. smaller lots, same basis lb .59 - —
Cerium hydrate 74% CeO, fib dms., 100-lb lots or more lb 1.40 - —
77% CeO, fib dms, 100-lb lots or more lb 1.74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide, optical grade, bgs., 50-lb lots or more, dlvd, lb 1.85 1.90
bgs., smaller lots, dlvd. lb 2.15 —
Cetyl alcohol NF fib cns., c.l., t.l., dlvd E lb .41½- —
fib cns, t.c.l. same basis lb .43½- —
tanks same basis lb .39 —
Extra, cns, c.l., t.l., dlvd E lb .48½- —
fib cns, t.c.l., same basis lb .50½- —
tanks, same basis lb .46 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, lb 1.00 - 1.25
Roman, cs. lb 1.50 1.75
Chamomile oil, blue Hungarian bots lb 350.00 —
Charcoal activated NF fib dms, c.l., works lb .34 - —
fib, dms., 5-ton lots, works lb .35 - .35½
fib dms, smaller lots, works lb .36 .59
Charcoal, black (see Charcoal activated)
Charcoal, bone (see Bone black).
Charcoal hardwood, lump, bulk c.l., f.o.b plant ton 55.00 - —
briquets, bulk, c.l., f.o.b plant ton 80.00 - —
5-lb paper bgs., c.l., same basis ton 100.00 - —
20-lb paper bgs., c.l., f.o.b plant, ton 90.00 - —
40-lb paper bgs c.l. same basis ton 86.00 - —
Chenopodium oil, NF, cns lb 4.75 5.00
Chicago acid, paste bbls, frt alld, lb 3.21 - —
Chinawood oil (see Tung oil).
Chloral tech, 94% min, dms., c.l., works lb .43 - —
dms., t.c.l., works lb .44 - —
tanks, multiple units, 5 cars, dms, t.c.l. works lb .21 - —
Chloral hydrate, USP jars, 1,000-lb lots lb 1.00 - —
jars, 500-lb lots lb 1.03 - —
jars, 100-lb lots or less lb 1.05 - —
Chlordan, agricultural dms., c.l., frt alld lb .65 - —
dms, t.c.l. 5,000-10,000-lb. lots, frt alld lb .66 - —
Chlordan, clarified, dms, c.l., frt. alld lb .69 - —
dms, t.c.l. 5,000-10,000-lb. lots, frt alld lb .70 - —
Chlorinated paraffin, 40%., dms., c.l., frt. alld lb. .15 - —
dms, t.c.l. 10 dms or more, same basis lb. .16 - —
70%, dms., c.l., same basis lb. .18½- —
dms, t.c.l. 10 dms or more, same basis lb. .19½- —

Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb .60 - —
ctns., t.c.l. works lb .61 - —
125 cps, ctns., c.l., works lb .70 - —
300 cps., ctns., c.l., works lb .80 - —
Chlorine, liq., cyls., c.l., works, frt equald lb .11 - —
cyls., t.c.l., Metropolitan area lb .12½- .13¼
tanks, single units, works, frt. equald 100 lbs. 3.25 - —
tanks, multiple units, 5 cars, works, frt equald 100 lbs. 4.15 - —
tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 5.85
tanks, multiple units, 1 car, same basis⅝ 100 lbs. 6.25 7.25
Chloroacetic acid mono, flake, 99%, purif. dms., c.l lb .23½- .25½
dms, t.c.l lb .24½- —
tech. flake 96-97%, dms., c.l., frt. equald lb .19 - —
dms, t.c.l frt equald lb .20 - —
2-Chloro-4-aminotoluene, tech., liq., dms., frt alld lb 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls, lb 1.38 - —
6-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb .66 - —
m-Chloroaniline dms., c.l., frt. alld, lb .75 - —
dms., t.c.l., same basis lb .77 - —
tanks, same basis lb .73 - —
o-Chloroaniline, dms., c.l., frt. alld, lb .52 - —
dms., t.c.l., same basis lb .54 - —
tanks, same basis lb .50 - —
p-Chloroaniline dms., c.l., frt. alld, lb .77 - —
dms., t.c.l., same basis lb .79 - —
o-Chlorobenzaldehyde, dms., t.l., works lb 1.05 - —
dms., t.t.l., same basis lb 1.20 - —
o-Chlorobenzaldehyde, dms., t.c.l., works lb 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb 1.10 - —
fib. dms., smaller lots, works lb 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works, lb 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb 2.30 - —
Chloroform, tech., dms., c.l., dlvd, E lb .18 - —
dms., t.c.l., same basis lb .19 - —
tanks, same basis lb .17 - —
Chloroform, USP, dms., c.l., dlvd, lb .27 - —
dms., t.c.l., dlvd lb .30 - —
tanks, minimum 4,000 gals. dlvd, lb .25 - —
2-Chloro-4-nitroaniline, paste, dlvd, E., 100% basis lb .90 - —
Powd., dlvd, E., 100% basis lb 1.00 - —
4-Chloro-2-nitroaniline, powd., dlvd, E lb .86 - —
4-Chloro-2-nitrophenol, tech., paste, dms, frt alld lb .75 - —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt alld lb .99 - —
o-Chloro-2-nitrotoluene, tech, solid, dms., frt. alld lb .20½- —
o-Chlorophenol, dms, c.l., frt. equald lb .37 - —
dms, t.c.l. same basis lb .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb .37 - —
dms, t.c.l. same basis lb .38 - —
Chloropicrin, comml., cyls., 180 lbs., frt alld lb 1.07 - —
cyls., 100 lbs., same basis lb 1.08 - —
cyls., 50 lbs., same basis lb 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb .0465- —
dms., t.c.l. frt equald lb .0515- —
tanks, frt equald lb .0415- —
Chlorosulfonic acid, in stainless steel dms ½c per lb higher
o-Chlorotoluene tech, dms., t.l., works lb .37 - —
dms., t.c.l., t.t.l., same basis lb .38 - —
Choline bitartrate, 100-lb. dms., frt. equald lb 1.25 - —
Choline chloride, 100-lb dms., frt. equald lb 1.25 - —
Choline dihydrogen citrate, 100-lb, dms., frt. equald lb 1.25 - —
Chrome green (F dark, light, medium blue content, 1-15%, bbls, dlvd E of Rockies, lb .43 - —
blue content 16-30%, bbls., same basis lb .44 - —
medium blue content, 41-45% bbls., same basis lb .44 - —
blue content, 45-49%, bbls., same basis lb .45 - —
Chrome green, reduced color 25%, bbls., same basis lb .30 - —
Chrome green prices 1c higher W of Rockies
Chrome orange CP bbls., dlvd E of Rockies lb .35 - —
Chrome orange prices 1c higher W of Rockies
Chrome yellow CP bbls., dlvd E of Rockies lb .35 - —
Chrome yellow price 1c higher W of Rockies
Chromic acid 99¾%, dms., c.l., works, frt. equald lb .29½- —
dms., t.c.l., dlvd N. Y. Metropolitan area lb .30 .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, dms., 500-2,000-lb lots, works, lb .10 - —
Chromium fluoride bbls, works lb .51 .52
Chromium oxide, hydrated, bbls., fib dms, c.l. frt alld, lb 1.20 - —
Pure, bgs., c.l. frt alld lb .44½- —
bgs. l.c.l. same basis lb .45¼- —
Chromium trioxide, NF bots lb 1.15 - —
Cinchona bark NF red, broken, bgs lb .25 - —
NF yellow broken bgs lb .35 - .40
Cinnamic acid refd., bots lb 2.50 3.50
Cinnamic alcohol bots lb 1.50 1.60
Cinnamic aldehyde dms lb .80 1.00
Cinnamon Ceylon No 2, bgs lb .53 - —
Ceylon, No "0000," bgs. lb .73 - —
Cinnamon bark oil, bots lb 42.00 -48.00
Cinnamon leaf oil, crude, dms lb 1.60 2.00
USP (Cassia), cns., dms lb 8.50 -13.50
Citral, CP bots lb 4.50 - 5.00
Extra, bots lb 3.60 5.00
Syn., dms lb 7.25 7.40
Citric acid USP anhyd., fine gran., bgs, dms., c.l lb .29½- .30
bgs, dms, 10,000-lb lots, l shipt lb .30 .30½
bgs, dms, smaller lots lb .30½- .31
Citric acid, USP hydrous, fine gran., bgs., dms., c.l lb .27½- .28
bgs, dms, 10,000-lb lots, 1 shipt lb .28 .28½
bgs, dms, smaller lots lb .29 .29½
Powdered citric acid ½c. per lb. higher
Citronella oil, Ceylon, dms lb 1.00 —
Java-type, dms lb 1.20 - 1.35
Citronellal, bots., dms. lb 1.40 - 1.60
Citronellol, bots, dms lb 1.90 2.50
Citronellol synthetic, dms lb 1.70 —
Civet artif., bots lb 13.75 -15.00
Nat., bots oz 8.50 -15.00

Clay, ball., dom., airfloated, bgs., c.l., Tenn ton 17.50 -21.50
crushed shed moisture, bulk, c.l., Tenn ton 8.00 -11.50
imp., airfloated, bgs., c.l., Atl. port net-ton 43.00 -47.00
lump, bulk, Atl. port net-ton 31.50 -37.50
Clay, China, dom., dry-grd., air-floated, 99%, 325 mesh, Georgia, bgs., c.l., works, ton 11.00 -17.00
Georgia, bgs., t.c.l., works, ton 13.50 -22.50
imp., white, lump, bulk, c.l., ex-dock, Philadelphia, Portland, Me long-ton 23.00 -35.00
white, powd., bgs., c.l., ex dock, net-ton 50.00 —
bgs., t.c.l., ex whse net-ton 60.00 -70.00
Cleaners naphtha, petroleum, 105° F Flash, tankcars, New Jersey and New York gal. 18 —
Group 3 gal. .12675- —
Houston, Texas gal. .145 —
140 F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 gal. .154 - —
Houston Texas gal. .17 - —
Cleve's acid tech., mixed, solid, dms., frt alld lb 1.05 - —
1.6 tech. solid dms. frt alld lb .77 - —
1.7 tech., dms. frt alld lb 2.20 - —
Clove bud oil, USP, dms. lb 2.65 - —
Cloves, Madagascar, bgs lb .35 - —
Zanzibar, bgs. lb .37 - —
Clove leaf oil, crude, dms lb 1.10 - —
CMC, crude, 96.4% low or medium vis bgs., 23,000 lbs., dvld, E., 100% basis lb .40 - —
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd, E., 100% basis lb .42 - .50
65% low or medium vis. bgs., c.l., dlvd, E., 100% basis lb .40 - —
t.c.l., dlvd, E., 100% basis lb .42 - 1.00
purif., high vis. (see Cellulose gum).
CMC, standard low or medium vis., bgs., 23,000 lbs. works, frt alld lb .57 - —
bgs. smaller lots, same basis, lb .59 1.00
CMC prices W of the Rockies are 2c. per lb lower and are on a works basis.
Coaltar crude resale for soln., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., t.c.l., ex whse gal. .39 - —
tanks works gal 20½- —
Coaltar pitch, aluminum, bulk, Works ton 42.00 - —
Carbon, bulk, works ton 42.00 - —
Indust., bulk, works ton 44.00 - —
Coke bulk works ton 40.50 - —
Fiber bulk works ton 48.00 - —
Roofing, 140-155° F., Federal Specification RP-381 Type I tanks, works ton 41.00 - —
Cobalt acetate 23.2% Co dms, dlvd lb 1.04 - —
Cobalt blue, genuine, 250 lb bbls, dlvd E of Rockies lb 4.90 - —
Cobalt blue prices 1c higher W of Rockies
Cobalt blue imitation (see Ultramarine blue)
Cobalt carbonate 48% Co powd., bgs., dlvd lb 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb .93 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb 1.97 - —
Cobalt linoleate, fused 8½% Co., dms lb .71½- —
Liq., 6% Co. dms lb .57½- —
Cobalt metal, 99% dms, f.o.b carrier lb 1.50 —
Cobalt naphthenate liq. 6% Co., dms, dlvd lb .48¾- —
Cobalt nitrate 20.1% Co bbls, dlvd, lb .75 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd E of Mississippi R lb 1.15 - —
70-71% Co kgs, same basis lb 1.12 —
Cobalt oxide prices W of Mississippi R. 3c. per pound higher
Cobalt phosphate powd., 32.1% Co., dms., dlvd lb 1.35 —
Cobalt resinate, fused 3% Co. dms lb .38½- —
Cobalt sulfate, cryst., 21% Co., dms., dlvd lb .64 - —
Monohydrated, 33% Co dms., dlvd lb 1.09 - —
Cobalt tallate 6% Co., dms. dlvd lb .44 - —
Cocaine, USP cns., 100-oz lots, f.o.b works oz 17.50 - —
Cocaine hydrochloride, cns 100-oz lots f.o.b. works oz 13.75 - —
Cocillana bark bls lb 18 - .20
Cocoa butter, bgs lb .53½- .58½
Coconut oil, crude, tanks, New York lb .13½- —
tanks, Pac. coast lb .12⅝- —
Refd., deodorized, dms. lb .19 - .20
Coconut oil acids, dis., dms lb .2 ½- .24
tanks lb .19 - —
double dist. (stripped), dms. lb .22½- .25
tanks lb .— - —
Cod oil, dms, spot lb 08¾- .08½
Codeine, NF cns., 100-oz lots oz 13.25 - —
Codeine hydrochloride cns. 100-oz lots oz 11.75 - —
Codeine phosphate, USP, cns. 100-oz lots oz 10.25 - —
Codeine sulfate USP cns. 100-oz lots oz 10.75 - —
Codliver oil, USP, dms gal 1.40 - 1.70
Cohosh root, black, bls lb 20 .25
Blue, bls lb 20 .25
Colchicine, USP, bots. 27.50 -29.00
Colchicum root, bls lb .35 .45
Colchicum seed, bgs. lb .85 - .90
Collodion, USP, dms. lb .32½- —
USP flexible dms lb .34 —
Colocynth pulp bls lb .75 - —
Colombo root bls lb .16 .18
Condurango bark bls lb .18 .20
Congo copal gum, No 1, bgs lb .26 - .27
No 2, bgs lb .23 - .25
No 3, bgs lb .21 - .24
Copaiba balsam, cns., dms. lb .80 - .90
Copaiba oil cns lb 1.35 2.00
Copper acetate bbls, c.l., works lb .53 - —
bbls., t.c.l. works lb .54 - —
Copper carbonate, 55%, dark dense, works lb 34.35 - —
bgs., t.c.l., works lb 35.85 - —
Copper chloride, cupric, anhyd., dms., works lb .43½- .44
cryst., dihydrate, dms., works lb .29¾ .30¼
cryst., dried, dms., works lb .37¾- .38½
Copper chloride, cuprous, dms., works lb .3855- .4155
Copper cyanide, tech., dms 20,000-lb lots or more lb .609 —
dms, 1,000-lb lots or more lb .619 —
dms, smaller lots lb .639 .65
Copper gluconate dms lb 3.20 —
Copper hydrate dry, dms, c.l., frt. E of Miss lb .52½- —
dms., t.c.l., same basis lb .53 - —
Copper metal, electrolytic, dlvd, Valley, basis lb .29 - —
Copper naphthenate liq. 8% Cu, dms, frt alld lb .36½- —

Copper nitrate, tech., cryst., dms., works	lb.	.30¼	.32¼
Copper oleate, solid, 8% Cu, dms., works	lb.	.48	—
Copper oxide, black, bbls., 100-5,000-lb. lots, works	lb.	.46	—
Copper oxide, red, 97%, USN Type I, bbls., 100-5,000-lb. lots,	lb.	.46½-	—
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works	lb.	.45½-	—
Copper quinolinolate, 18% Cu, dms., ton lots	lb.	4.25	—
10% active quinolinolate, dms	lb.	1.14	1.15
Copper resinate, precip., dms., frt. alld.	lb.	.47	—
Copper sulfate, CP, gran., dms., works	lb.	.1385-	—
Cryst., 99%, bgs., c.l., works, 100 lbs.		12.00	—
bgs., l.c.l., works, 100 lbs.		12.50	15.00
Copper sulfate, monohydrated, 35%, dms., c.l., works, 100 lbs.		22.65	—
dms., l.c.l., works, 100 lbs.		23.40	—
Tribasic, distributors, bgs., c.l., works, 100 lbs.		29.10	—
bgs., l.c.l., works, 100 lbs.		30.60	—
Copper undecylenate, dms	lb	2.75	—
Copra, Atl., Gulf ports, c.i.f.	ton.	162.50	—
Pac. ports, c.i.f.	ton.	157.50	—
Coriander oil, USP, bots.	lb.	6.50	7.25
Coriander seed, Moroccan, bgs.	lb.	.18	—
Rumanian, bgs.	lb.	.14	—
Yugoslavian bgs	lb.	.08½-	—
Corn oil, crude, tanks, works	lb.	.16½-	—
Foots, (soapstock acid 95%) tanks, New York	lb.	.05½	Nom.
Refd., salad, dms.	lb.	.2223-	.2250
tanks	lb.	.1960-	—
Corn oil acids, dist., dms.	lb.	.15½-	.16
tanks	lb.	.13	—
Corn sugar, tanners, chipped, paper bgs. c.l., 60,000 lbs. min., 100 lbs.		7.30	—
paper bgs., l.c.l. 100 lbs.		7.45	—
Corn syrup, 43° Be., tanks, dlvd. N.Y., 100 lbs.		6.30	—
non-ret. dms., c.l., same basis, 100 lbs.		7.23	—
Corrosive sublimate (see Mercuric chloride).			
Cortisone acetate, USP bots., kilo or more	gram	.95	1.75
Costus oil, bots.	oz.	6.00	—
Cottonseed meal, 41%, bgs., Memphis	ton.	57.00	59.00
Cottonseed oil, crude, tanks, South, East	lb.	.12¾-	.12⅞
tanks, Valley	lb.	.12⅞-	—
tanks, Texas, Lubbock	lb.	.12½-	—
tanks, Texas, Waco	lb.	.12⅜-	—
Foots (soapstock, acid 95%), New York, tanks	lb.	.03½-	—
Refd., salad, dms.	lb.	.18¾-	.18⅝
tanks, salad, dms.	lb.	.16¾-	—
Cottonseed oil acids, dist., dms.	lb.	.15½-	.16
tanks	lb.	.13	—
Coumarin, NF, cryst., dms.	lb.	3.30	3.40
Cramp bark, NF, bls.	lb.	.90	1.00
Cream of tartar (see Potassium bitartrate).			
Creosote carbonate NF bots. chys.,	lb.	3.05	3.20
Creosote, coaltar, crude, tanks, works, frt. adjusted	gal.	.24	—
Crude, soln 80%, tanks, works,	gal.	.226	—
Refd., dms., c.l., works	gal.	.50	—
dms., l.c.l., same basis	gal.	.62	—
tanks, same basis	gal.	.38	—
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.			
Creosote, beechwood, chys., dms., f.o.b. works, dlvd. in Metropolitan area	lb.	1.72	1.77
Hardwood, NF, chys., dms., same basis	lb.	1.42	1.47
Pinewood, dms., incl., c.l., works,	lb.	.0611-	—
dms, incl., l.c.l., works	lb.	.0684-	—
dms, incl., l.c.l. ex whse, New York	lb.	.0793-	—
tanks, works	lb.	.0511-	—
Creosote oil (see Creosote coaltar).			
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret., dms., c.l., frt. alld	lb.	.16½-	—
non-ret dms., l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.145	—
Cresol, USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., same basis	lb.	.18	—
non-ret. dms., l.c.l., same basis,	lb.	.19	—
tanks, same basis	lb.	.16	—
m-Cresol, 95-98%, dms., c.l., works,	lb.	.60	—
dms., l.c.l., works	lb.	.61	—
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald	lb.	.18	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.16	—
2.97% 2°C. dms. c.l., frt. equald.	lb.	.22	—
dms., l.c.l., same basis	lb.	.23	—
tanks, same basis	lb.	.20	—
o-Cresol, 30.5°C. m.p and over, ret., dms., c.l., frt. equald	lb.	.17	—
ret. dms., l.c.l., same basis	lb.	.18	—
tanks, same basis	lb.	.15	—
30°-30.49°C m.p., dms., c.l., frt. equald	lb.	.16½-	—
ret. dms., l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.14½-	—
Cresol, 29°-29.9°C. m.p., dms., c.l., frt. equald	lb.	.16	—
ret. dms., l.c.l., same basis	lb.	.17	—
tanks, same basis	lb.	.14	—
25°-28°C m.p., dms. c.l., frt. equald	lb.	.15	—
ret. dms., l.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Cresol, 98% dms., c.l., dlvd	lb.	.52	—
dms., l.c.l., dlvd	lb.	.53	—
tanks, dlvd	lb.	.49	—
2,3-Cresotic acid dms., ton lots, works	lb.	.70	—
dms., smaller lots, works	lb.	.72	—
p-Cresyl methyl ether, cns	lb.	1.80	2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald	gal.	1.35	—
dms., l.c.l., same basis	gal.	1.40	—
tanks, same basis	gal.	1.15	—
metapara content 25% or less, dms., c.l., t.l., same basis	gal.	1.20	—
dms., l.c.l., same basis	gal.	1.25	—
tanks, frt. equald	gal.	1.00	—
Cresylic acid, coaltar, imp., meta-para content 25% or less, f.o.b. works, frt. equald, to competitive points, 50 dms. or more,	gal.	1.03½-	—
less than 50 dms., same basis	gal.	1.05	1.15
tanks, same basis	gal.	1.00	—
Crotonaldehyde, 91-93% dms., l.c.l., works	lb.	.25	—
Crotonic acid, dms., 200 lbs. or more, l.c.l., dlvd	lb.	.36	—
Cryolite, nat, industr., bgs., c.l., works 100 lbs.		13.00	—
bgs., l.c.l. works 100 lbs.		14.25	—
Cube root, powd, 5% rotenone, bgs., t.l., works	lb.	.31	—
bgs., l.t.l., works	lb.	.22	—
Cubeb berries, NF, bgs.	lb.	1.20	—
Powd., cs.	lb.	1.45	—
Cubeb oil, cns.	lb.	8.75	9.00
Cumene, dms., c.l., works	lb.	.12	—
dms., l.c.l., works	lb.	.14	—
tanks, works	lb.	.11	—
Cumin seed, Iranian, bgs.	lb.	.19	—
Moroccan, bgs.	lb.	.36	—
Turkish, bgs.	lb.	.18	—
Cumin seed oil, bots., cns.	lb.	15.50	17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract.	ton.	57.00	—
Fertilizer, pulv., 21% N, bgs., works unit-ton		2.85	—
Cyanamide, fertilizer, indust. grade, bgs, c.l., works	ton.	75.00	—
bgs., l.c.l., works	ton.	96.00	—
Indust. grade, 6-16 mesh, dms., c.l., works	ton.	120.00	—
dms., l.c.l., works	ton.	140.00	—
Cyclohexane, 99%, tech., dms., c.l., dlvd. E. of Rockies	gal.	1.02	—
dms., l.c.l., same basis	gal.	1.10	—
dms., c.l., dlvd. W. of Rockies	gal.	.77	—
dms., l.c.l., same basis	gal.	.85	—
tanks, works	gal.	.55	—
98%, tech. 40-dm. lots or more, f.o.b works	gal.	.56	—
5-39 dms., same basis	gal.	.60	—
tanks, same basis	gal.	.36	—
Cyclohexanol, tech., dms., c.l., works, frt. alld. E	lb.	.28½-	—
dms., l.c.l., works, same basis,	lb.	.29½-	—
tanks, works, same basis	lb.	.26	—
Cyclohexanone, tech., dms., c.l., works	lb.	.33½-	—
dms., l.c.l., works	lb.	.34½-	—
tanks, works	lb.	.31	—
Cyclohexylamine, tech., dms., c.l., works	lb.	.49	—
dms., l.c.l., works	lb.	.50	—
tanks, works	lb.	.47	—
Cypress oil, bots.	lb.	5.30	—

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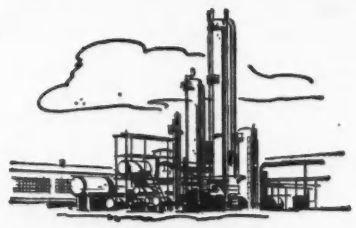
2,4-D, tech., bgs., dms., c.l., works, frt. equald	lb.	.40	—
bgs., dms., l.c.l., same basis	lb.	.45	.49
2,4-D butyl ester, dms., c.l., works,	lb.	.43	—
dms., l.c.l., same basis	lb.	.48	.52
tanks, same basis	lb.	.42	—
2,4-D isopropyl ester, dms., c.l., works	lb.	.43	—
dms., l.c.l., works	lb.	.48	.52
tanks, works	lb.	.42	—
Dammar gum Batavia, A, E, cs	lb	No stocks.	
East India, Batu, bold, bgs	lb.	.15½	.18
nubs and chips, bgs.	lb.	.10	.11
black, bold, bgs	lb.	.16	.18
nubs and chips, bgs.	lb.	.13	.14½
unscraped, bgs.	lb.	.13	.14½
pale, chips, bgs.	lb.	.16	.18
pale, nubs, bgs.	lb.	20¾	.24
Siam, cs.	lb.	.31½	.34
Singapore, No. 1, bgs.	lb.	.38	.44
No. 2, bgs.	lb.	.29	.32
dust, bgs.	lb.	.18	.20
No. 3, bgs.	lb.	No stocks.	
Dandelion root, bls.	lb.	.35	.40
DDD, tech., flake, grd., fib, dms., c.l., works	lb.	.45	.47
fib, dms., l.c.l., works	lb.	.46	.48
DDT, flake or lump, bgs., c.l., dlvd	lb.	.23	—
bgs., smaller lots, same basis	lb.	.25	—
fib dms., c.l., same basis	lb.	.24	—
fib dms., smaller lots, same basis	lb	26	—
Powdered DDT 1c. per pound higher.			
DDVP (see Dimethyl dichlorovinyl phosphate)			
i-Decanol, tech., dms., c.l., dlvd. E.	lb.	.43½-	—
dms., l.c.l., dlvd. E.	lb.	.45½-	—
tanks, dlvd. E	lb.	.41	—
Decyl alcohol, mixed isomers, dms., c.l., dlvd	lb.	.23½-	—
dms., l.c.l., dlvd.	lb.	.25	—
tanks, dlvd.	lb.	.21	—
Perfume grade, bots.	lb	1.00	2.00
Decyl alcohol, normal (see i-Decanol)			
Deertongue leaves, bls.	lb.	.50	.60
Defluorinated phosphate, feed grade, 14% P, paper bgs., c.l., t.l., Tupelo, Miss	ton.	52.00	—
18% P, paper bgs., c.l., Texas City	ton.	61.25	—
paper bags, c.l., works, Miss	ton.	68.00	—
19% P, paper bgs., c.l., t.l., works, Houston, Tex	ton.	66.35	—
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.			

"COOLING WITH PURECO CO_2 LIQUID...

eliminated a major bottleneck"*



*This statement was contained in an engineer's report concerning the use of CO_2 as a coolant by a company that sulfunates straight chain alcohol. CO_2 sparged directly into the chemicals in the reaction tank, maintains a controlled temperature of -70° F or below. Total time for cooling *55 minutes . . . former time 3 to 4 hours.*

Perhaps Pureco CO_2 Technical Service can save your company time and money, too!

New applications for Pureco CO_2 are being found constantly . . . new ways of doing things more efficiently and economically with this versatile chemical. The engineers in Pureco's Technical Service are highly trained in the application of its many uses . . . they are ready, willing and able to discuss, demonstrate or assist in the experimental development of CO_2 applications, whether they entail a new use for the product or the improvement of an existing one.

For example:

USE PURECO CO_2 AND/OR "DRY-ICE" AS A REFRIGERANT FOR . . .

Chill grinding of heat sensitive materials.
Chill grinding of animals' glands for hormones, etc.
Freeze-drying.
Blast chilling of environmental test chambers.

USE PURECO CO_2 AS A GAS FOR . . .

Inert blanketing of dyes, inks and other flammable mixtures.
Sparging of varnishes and other mixtures.
Distillation vehicle in distillation of phthalic anhydride in manufacture of resins.
Flushing out lacquer from TV tube interiors after optical coating.
Inert pressure medium.

USE PURECO CO_2 AS AN INGREDIENT FOR . . .

Forming carbonates, especially barium carbonates.
Manufacture of aspirin.
Controlling acidity—as in coagulating foam rubber.

Pureco is at your service. Call or write:

PURECO CO_2

PURE CARBONIC

Pure Carbonic Company, A Division of Air Reduction Company, Incorporated
Nation-Wide Pureco CO_2 Service-Distributing Stations in Principal Cities
General Offices: 150 East 42nd Street, New York 17, N.Y.

AT THE FRONTIERS OF PROGRESS YOU'LL FIND AN AIR REDUCTION PRODUCT

Degras—Diethylene Glycol Monobutyl Ether

Degras, common (15-17% free fatty acid), 400-lb. dms. lb. .12 - .14
Neutral (over 2% free fatty acid), 400-lb. dms. lb. .13 - —

Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., divd. E of Rockies, gal. 69½- —
dms., t.c.l., same basis gal. 74½ .80½
tanks, divd., same basis gal 53½ —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, proprietary solvent, dms., c.l., divd. E of Rockies gal. .72 —
dms., t.c.l. same basis gal 77 .83
tanks, same basis gal 56 —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, SD1, dms., divd. E of Rockies gal. .70½ —
dms., t.c.l. same basis gal. 75½ .81½

Denatured alcohol, ethyl, SD1, tanks, same basis gal. .54½- —
SD2B, dms., c.l., divd. E of Rockies gal. .69 —
dms., t.c.l., same basis gal. 74 .80
tanks, same basis gal. .53 —
SD3A, dms., c.l., divd. E of Rockies gal. .68 —
dms., t.c.l. same basis gal. 73 .79
tanks, same basis gal. .52 —

Denatured alcohol, ethyl, SD23A, dms., c.l., divd. E of Rockies gal. .70½ —
dms., t.c.l., same basis gal. 75½ .81½
tanks, same basis gal. .54½- —

Denatured alcohol, ethyl, SD23H, dms., c.l., divd. E of Rockies gal. .71 - —
dms., t.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 —

Denatured alcohol, SD29, dms., c.l., divd. E. of Rockies gal. .69½- —
dms., t.c.l., same basis gal. .74½- .80½
tanks, same basis gal. .53½- —

SD30, dms., c.l., divd. E. of Rockies gal. .68 - —
dms., t.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —

Denatured alcohol, ethyl, SD-35A, dms., c.l., divd. E. of Rockies gal. .71 - —
dms., t.c.l., same basis gal. .76 - .82
tanks, same basis gal. .55 - —

Denatured alcohol, ethyl, SD-40, dms., divd. E. of Rockies gal. .70½- —
dms., t.c.l., same basis gal. .75½- .81½
tanks, same basis gal. .54½- —

For anhyd. alcohol on above formulas prices are 7c. per gal. higher.

West coast divd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.

d-Desoxyephedrine hydrochloride, dms. lb. 15.00 -17.00

dl-Desoxyephedrine hydrochloride, dms. lb. 6.50 - —

Dextrin, corn, gum, paper bgs., c.l., 100 lbs. 9.39 - —
paper bgs., l.c.l. 100 lbs. 9.54 - —
canary dark, paper bgs., c.l. 100 lbs. 9.23 - —
paper bgs., l.c.l. 100 lbs. 9.38 - —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 9.13 - —
paper bgs., l.c.l. 100 lbs. 9.28 - —
white paper bgs., c.l. 100 lbs. 8.97 - —
paper bgs., l.c.l. 100 lbs. 9.12 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs higher

Dextrose, anhyd., comi., bgs., c.l. 100 lbs. 8.65 - —
bgs. t.c.l. 100 lbs. 8.80 - —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 - —
100-lb. dms. 100 lbs. 15.20 - —
Hydrated, comi., bgs., c.l., ex whse 100 lbs. 7.45 - —
bgs. c.l., ex whse 100 lbs. 7.60 - —
USP dms. lb. .19¾- —

Diacetone alcohol, acetone-free, dms., c.l., divd lb. .15½- —
dms., t.c.l., divd. lb. .17 - —
tanks, divd lb. .13 - —
Tech., dms., c.l., divd. lb. .15 - —
dms., t.c.l., divd. lb. .16½- —
tanks, divd lb. .12½- —

Diacetyl, flavor grade, bots lb. 3.30 - 4.30

Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., t.c.l., works lb. .33 - —
tanks, works lb. .29½- —

Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., t.c.l., works lb. .33 - —
tanks, works lb. .29½- —

Diallylamine, dms., c.l., divd. lb. .98½- —
dms., t.c.l., divd. lb. 1.00 - —
tanks, divd. lb. .96 - —

o-Dianisidine, dry, tech., fib. dms. lb. 2.00 - —

Dibenzyl sebacate, dms., c.l., works. lb. .93 - —
dms., t.c.l., same basis lb. .94 - —
tanks, same basis lb. .91 - —
Dibromobenzene, bgs., 500-lb. lots. lb. .58 - —

2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., divd. lb. .65 - —
t.t.l., dms., same basis lb. .68 - —
Food grade, c.l., t.l., dms., divd. lb. .65 - —
dms., t.t.l., same basis lb. .68 - 1.10
Tech., dms., c.l., t.l., divd. lb. .57 - —
dms., t.c.l., same basis lb. .60 - —
tanks, same basis lb. .54 - —

Dibutyl fumarate, dms., c.l., t.l., divd. E lb. .31½- —
dms., t.c.l., t.t.l., divd. E lb. .33 - —
tanks, divd E lb. .29 - —

Dibutyl maleate, dms., c.l., t.l., divd. E lb. .31½- —
dms., t.c.l., t.t.l., divd. E lb. .33 - —
tanks, divd. E lb. .29 - —

Dibutyl phthalate, dms., c.l., divd. E lb. .31½- —
dms., t.c.l., same basis lb. .33 - —
tankcars, tanktrucks, 2.000 gals., same basis lb. .29 - —
tanktrucks, 1,000-1.999 gals., same basis lb. .29 - —

Dibutyl sebacate, dms., c.l., works. lb. .67½ —
dms., t.c.l., works lb. .68½ —
tanks, works lb. .65½- —

Dibutyl tartrate, dms., works, frt. alld lb. .65½- —

Dibutylamine, dms., c.l., divd lb. 55½- —
dms., t.c.l., same basis lb. .57 —
tanks, same basis lb. .53 —

Dicapryl phthalate, dms., c.l., divd lb. .28½- —
dms., t.c.l., divd. lb. .30 - —
tanks, divd. lb. .26 - —

Dicapryl sebacate, dms., c.l., works lb. .63 —
dms., t.c.l., works lb. .63½- .64
tanks, works lb. .61 —

2,5-Dichloroaniline, dms., works lb. 83 —

3,4-Dichloroaniline, tech., solid, tanks, frt alld lb. .73 —

o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾ —
dms., t.c.l., same basis lb. .13¾- —
tanks, same basis lb. 11 —

p-Dichlorobenzene, dms., c.l., t.o.b., works, frt. alld E lb. .12 —
dms. 2.000 lbs. or more same basis lb. .14½- —

1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½- —
dms., t.c.l., or t.t.l., works lb. .34 - —
tanks, works lb. .32 - —

Dichlorodiphenyltrichloroethane (see DDT).

2,2-Dichloroethyl ether, dms., c.l., t.l., divd E lb. .15½- —
dms., t.c.l., t.t.l., same basis lb. .17 - —
tanks, same basis lb. .13 - —

Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 - —
dms., t.c.l. same basis lb. 75 - —

Dichloropentanes, dist., dms., c.l., works lb. 05 - —
dms., t.c.l., works lb. 06 - —
tanks, works lb. 03 - —

Dichlorophenoxyacetic acid (see 2,4-D).

Dicyclohexylamine, dms., c.l., works lb. .54 - —
dms., t.c.l., works lb. .55 - —
tanks, works lb. .52 - —

Dicyclohexyl phthalate, gran., fib. dms., c.l., works frt alld. lb. .47½- —
fib. dms., t.c.l., same basis lb. .49 - —

Dicyclopentadiene, dms., c.l., t.o.b., works lb. .14½- —
dms., t.c.l., same basis lb. .14¾- —
tanks, same basis lb. .12 —

Didecyl phthalate, dms., c.l., works. lb. .28½- —
dms., t.c.l., same basis lb. .30 - —
tankcars, tanktrucks, 2.000 gals lb. .26 —
tanktrucks, 1.000-1.999 gals, same basis lb. 26½- —

Dieldrin, dms., c.l., divd. lb. 1.85 - —
dms., t.c.l. divd. lb. 1.90 - —

Diethanolamine, dms., c.l., divd E. lb. .27 - —
dms., t.c.l., same basis lb. .28½- —
tanks, same basis lb. .24½- —

Diethanolamine lauryl sulfate, dms., c.l., frt alld lb. .27½- —
dms., t.t.l. frt. alld. lb. .28½- —
tanks, frt alld lb. .26½- —

Diethyl barbituric acid (see Barbital).

Diethyl carbonate, dms., c.l., t.o.b. works lb. .47½- —
dms., t.c.l., same basis lb. .48½- —
tanks, same basis lb. .45 —

Diethyl ethanolamines, dms., c.l., divd lb. .69½- —
dms., t.c.l., divd. lb. 71 - —
tanks, divd lb. .67 —

Diethyl oxalate, dms., c.l., t.o.b. works lb. .42½- —
dms., t.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 —

Diethyl phthalate, dms., c.l., divd. lb. .29¾- —
dms., t.c.l., divd. lb. .31¼- —
tanktrucks, 1.000-1.999 gals, same basis lb. .27¾- —
tankcars, tanktrucks, 2.000-lb. lots, same basis lb. .27¼- —

Diethyl sulfate, dms, c.l., frt. alld. E. lb. .21 - —
dms., t.c.l., frt. alld. E lb. .22½- —
tanks, frt. alld. E lb. .18½- —

Diethyl thiourea, dms., c.l., t.l., works lb. .58 - —
dms., t.c.l., same basis lb. .59 - —

Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works. lb 2.30 - —
5-44 dm. lots, works lb 2.35 - —
1-4 dm. lots, works lb 2.40 - —

N,N-Diethyl-m-toluidine, tech., liq., tanks, frt alld lb. .83 —

Diethylamine, dms., c.l., divd E lb. .32 —
dms., t.c.l., same basis lb. .53½ —
tanks, same basis lb. 49½- —

N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 —
dms., t.c.l., same basis lb. .58 —
tanks, same basis lb. 55 —

Diethylbenzene, 380 lb. dms., c.l., t.l., frt alld., Zone 1 lb. .17½- —
f.o.b., Zone 2 lb. .18½- —
dms., t.c.l., c.l., f.o.b. Zone 1 lb. .19½- —
f.o.b. warehouse points, Zone 2 lb. .20½- —

Diethylbenzene tankcars, Zone 1 lb. .15 —
Zone 2 lb .16 —

Zone 1 is East of the Rockies Zone 2. West of the Rockies

Di-2-ethylhexyl adipate (see Di-octyl adipate).

Di-2-ethylhexyl phthalate (see Di-octyl phthalate), phthalate).

Diethylene glycol dms. c.l. divd E. lb .17¾ —
dms., t.c.l., same basis lb. .19¼ —
tanks same basis lb. .15¼ —

Diethylene glycol diethyl ether, dms., c.l., works lb. .55 - —
dms., t.c.l., works lb. .55¾- —

Diethylene glycol monobutyl ether, c.l., dms., frt. alld. E lb. .30¾- —
dms., t.c.l., frt. alld. E lb. .32¼- —
tanks, frt. alld. E lb. .28¼- —

WHAT'S NEWS IN ENJAY RESINS FOR SURFACE COATINGS

Alkyd Melamine
After 500 Hours
Salt Spray

Epoxy Ester
After 700 Hours
Salt Spray

Buton 200
After 700 Hours
Salt Spray

BUTON® 200 Resin offers better corrosion resistance—saves up to 1/3 the cost

In a recent series of salt spray tests, Buton 200 Resin outperformed epoxy ester and alkyd melamine formulations. All samples were automotive primer formulations with equivalent pigmentation. Test results? The Buton based primer had the lowest creep of all three. Impact testing also revealed that Buton-based primers had good adhesion, flexibility and impact resistance. By selecting Buton 200 Resin, you can save up to ⅓ on metal primers. Samples and a booklet on Buton Resins for metal primers may be obtained by writing to 15 West 51st Street, New York 19, N. Y.

EXCITING NEW PRODUCTS THROUGH PETRO-CHEMISTRY

ENJAY CHEMICAL COMPANY

A DIVISION OF HUMBLE OIL & REFINING COMPANY

ENJAY
RESINS

Diethylene glycol monobutyl ether acetate, dms., c.l., works	lb.	.30¼	—
dms., l.c.l., works	lb.	.31½	—
tanks, works	lb.	.29¼	—
Diethylene glycol monoethyl ether, dms., c.l., divd. E	lb.	.22½	—
dms., l.c.l., divd. E	lb.	.24	—
tanks, divd. E	lb.	.20	—
Diethylene glycol monoethyl ether acetate, dms., c.l., works	lb.	.27¼	—
dms., l.c.l., works	lb.	.28	—
tanks, works	lb.	.25¼	—
Diethylene glycol monomethyl ether, dms., c.l., divd. E	lb.	.21	—
dms., l.c.l., divd. E	lb.	.22½	—
tanks, divd. E	lb.	.18½	—
Diethylenetriamine, dms., c.l., divd. E	lb.	.44	—
dms., l.c.l., divd. E	lb.	.45½	—
tanks, divd. E	lb.	.41½	—
Diethylstilbesterol, USP, bots., 10-kilo lots	kilo.	100.00	147 50
bots, 1-kilo lot	kilo.	110.00	152.50
Digitalis leaves USP, dom., dms	lb.	1.25	—
Digitoxin, USP, bots	gram.	3.75	4.20
Diglycol laurate, dms., ton lots	lb.	.32½	—
Diglycol stearate, dms., t.l	lb.	.26	—
Diglycolic acid, bgs., c.l., t.l., works	lb.	.15½	—
bgs., l.c.l., works	lb.	.16	—
Dihexyl sebacate, dms., c.l., works	lb.	.66	—
dms., l.c.l., works	lb.	.67	—
tanks, works	lb.	.64	—
Dihydrazine sulfate, dms., works	lb.	1.10	1.25
Dihydrostreptomycin sulfate, bulk	gram.	.03	—
1,2-Dihydroxy anthraquinone, dms., works	lb.	3.45	—
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms	lb.	2.55	—
Tech., dms., 20,000 lbs or more	lb.	1.11	—
dms., 1,050 lbs to 20,000 lbs.	lb.	1.13	—
dms., 150 lbs to 1,050 lbs	lb.	1.15	—
Di-isobutyl ketone, dms., c.l., divd.	lb.	.17	—
dms., l.c.l., divd.	lb.	.18½	—
tanks, divd	lb.	.14½	—
Di-isobutyl phthalate, dms., c.l., divd E.	lb.	.31½	—
dms., l.c.l., same basis	lb.	.32½	—
tanks, same basis	lb.	.29	—
Di-isobutylene dms, c.l., divd. E	lb.	.10	—
dms., l.c.l., divd. E	lb.	.11½	—
tanks, divd E.	lb.	.08	—
Di-iso-octyl phthalate, dms., c.l., works	lb.	.29	—
dms., l.c.l., same basis	lb.	.30½	—
tanktrucks, 1,000-1,999 gals., works	lb.	.27	—
tankcars, tanktrucks, 2,000 gals., works	lb.	.26½	—
Di-iso-octyl sebacate, dms., c.l., works	lb.	.62	—
dms., l.c.l., works	lb.	.61¼	—
tanks, works	lb.	.60	—
Di-isopropanolamine, dms., c.l., divd.	lb.	.23¼	—
dms., l.c.l., same basis	lb.	.24¾	—
tanks, same basis	lb.	.20¾	—
Di-isopropylamine dms., c.l., divd. E of Rockies	lb.	.50½	—
dms., l.c.l., same basis	lb.	.52	—
tanks, same basis	lb.	.48	—
Dillweed oil, dom., bots., dms.	lb.	5.25	—
Dimethyl anthranilate, cns.	lb.	4.15	—
Dimethyl dichlorovinyl phosphate, 55-gal dms., divd	lb.	3.50	—
Dimethyl ethanolamine, anhyd., dms., c.l., divd. E	lb.	.78	—
dms., l.c.l., divd. E	lb.	.79½	—
tanks, divd. E	lb.	.75½	—
70% dms. c.l., divd., 100% basis, contained amines	lb.	.78	—
dms., l.c.l., divd. 100% basis.	lb.	.79½	—
tanks, divd., 100% basis	lb.	.75½	—
Dimethyl hydroquinone, dms.	lb.	1.90	2.20
Dimethyl phthalate, dms., c.l., works	lb.	.29¾	—
dms., l.c.l., works	lb.	.31¼	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.27¾	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.27¼	—
Dimethyl sebacate, dms., c.l., works.	lb.	1.31	—
dms., l.c.l., works	lb.	1.30	—
tanks, works	lb.	1.28	—
Dimethyl sulfate, ret. dms., c.l., works	lb.	.17½	—
ret. dms., l.c.l., works	lb.	.18½	—
tanks, works	lb.	.16½	—
Dimethyl sulfide, dms., c.l., works.	lb.	.17½	—
dms., l.c.l., works	lb.	.18½	.19½
tanks, works	lb.	.15	—
Dimethyl sulfoxide, dms., c.l., f.o.b. works	lb.	.35	—
dms., l.c.l., same basis	lb.	.37	.38
tanks, same basis	lb.	.33	—
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis	lb.	.38	—
dms., l.c.l., frt equald, 100% basis	lb.	.38½	—
tanks, frt. equald, 100% basis.	lb.	.28	—
40% soln., dms., c.l., frt. equald, 100% basis	lb.	.35	—
dms., l.c.l., frt. equald, 100% basis	lb.	.35½	—
N,N-Dimethylaniline, dms., c.l., frt. alld	lb.	.28	—
dms., l.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.26	—
N,N-Dimethylformamide, dms., c.l., t.l., works	lb.	.32½	—
dms., l.c.l., works	lb.	.33	.34
tanks, works	lb.	.30	—
2,4-Dinitroaniline, dms., frt. alld	lb.	.75	—
Dinitroaniline orange toner, CP, bbls., divd E. of Rockies.	lb.	1.61	—
Dinitroaniline orange toner prices 1c higher W of Rockies			
m-Dinitrobenzene, 89°C., dms	lb.	.36	—
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld E	lb.	.17¼	—
dms., l.c.l. frt. alld E.	lb.	.17¾	—
tanks, frt alld E.	lb.	.17	—
2,4-Dinitrophenol, bbls	lb.	.41	—
2,4-Dinitrotoluene, oil, dms.	lb.	.11	—
Refd. 63°C., dms	lb.	.23	—
Dioctyl adipate, dms., c.l., works	lb.	.42½	—
dms., l.c.l., works	lb.	.43½	—
tanks, works	lb.	.40	—
Dioctyl phthalate, dms., c.l., frt. alld. E	lb.	.29	—
dms., l.c.l., frt. alld. E	lb.	.30½	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.27	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.26½	—
Dioctyl phthalate prices ¾c. higher in West.			
Dioctyl senacate, dms., c.l., works.	lb.	.61¼	—
dms., l.c.l., works	lb.	.62¼	—
dms., l.c.l., works	lb.	.62¼	—
tanks, works divd	lb.	.59¼	—
1,4-Dioxane, dms., c.l., frt. alld. E.	lb.	.31½	—
dms., l.c.l., frt. alld. E	lb.	.33	—
tanks, frt. alld. E	lb.	.29	—
Prices in the west are 2c per lb higher.			

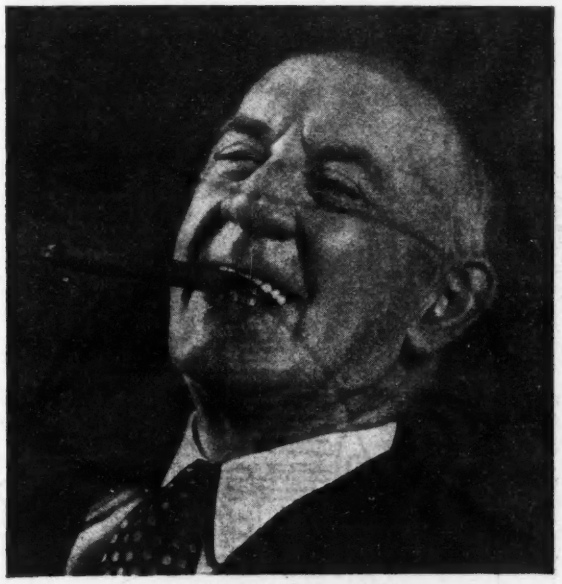
Dipentaerythritol, bgs., c.l., t.l., divd. E	lb.	.24	—
bgs., l.c.l., t.l., divd. E	lb.	.35	—
Dipentene, dest.-dist., dms., c.l., works	gal.	.58	—
dms., t.c.l., works	lb.	.62	—
dms., l.c.l., ex whse.	gal.	.78	—
tankcars, works	gal.	.41	—
Steam dist., dms. c.l., works, South	gal.	.72	—
dms., l.c.l., divd. New York	gal.	.91	—
tanks, works, South	lb.	.55	—
Dip oil (see Tar acid oil).			
Diphenolic acid 1,000-lb or more, bgs., works	lb.	.75	—
Diphenolic polyether acids, 1,000-lb. or more, bgs., works	lb.	1.00	—
Diphenyl, bgs., c.l., t.l., works	lb.	.16¾	—
bgs., l.c.l., works	lb.	.18½	—
tanks, works	lb.	.15¾	—
Diphenyl oxide perfume grade, cns.	lb.	.55	.70
Diphenyl phthalate dms., c.l., works.	lb.	.52	—
dms., l.c.l., works	lb.	.54	—
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald	lb.	.32	—
bgs., l.c.l., same basis	lb.	.34	—
Refd., fused, tanks, same basis	lb.	.29	—
Refd., diphenylamine in dms., ½c. per lb higher			
Diphenylguanadine, bgs., dms., ton lots, frt. alld.	lb.	.51	—
bgs., smaller lots, frt. alld	lb.	.52	—
Diphenylhydantoin-sodium, USP, dms	lb.	5.00	5.80
Dipropylene glycol, dms., c.l., frt. alld	lb.	.17	—
dms., l.c.l., frt. alld.	lb.	.18½	—
tanks, frt. alld.	lb.	.14¼	—
Dipropylene glycol prices 1c. higher in West.			

Diethylene Glycol Monobutyl Ether Acetate—Dyes

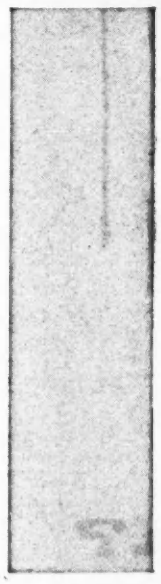
Dipropylene glycol methyl ether, dms. c.l., divd. E	lb	.20	—
dms., l.c.l., same basis	lb	.21½	—
tanks, same basis	lb	.18½	—
Dithiodibenzoic acid dms. 1,000-lb lots, works	lb.	1.80	—
Di-o-tolylguanidine, dms., ton lots, frt. alld	lb.	.71	—
dms., smaller lots, frt. alld	lb.	.72	—
Di-o-tolylthiourea, tech. solid, dms., c.l., t.l., frt alld	lb.	.58	—
Divinylbenzene, 20-25%, dms., c.l., works, frt equald	lb.	.20	—
dms., l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.19	—
50-60%, dms., c.l., works, 100% basis	lb.	1.00	—
dms., l.c.l., works, 100% basis.	lb.	1.05	—
tanks, same basis	lb.	.90	—
Dodecenyl succinic anhydride dms., c.l., t.l., divd. E	lb.	.50	—
dms, l.c.l., l.t.l., same basis	lb.	.52	—
Dodecylbenzene, dms., c.l., t.o.b., works, frt equald	lb	.134	—
dms, l.c.l. same basis	lb	144	—
tanks, same basis	lb.	.11½	—
Dodecylphenol, c.l., frt. alld	lb.	.22½	—
dms., l.c.l., same basis	lb.	.23½	—
tanks, same basis	lb.	.20	—
Dodecylphenol prices on shipments to Western States are 2c per pound higher.			
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, divd.:			
Blue, FD&C, No. 1	lb.	15.65	17.60
No. 2	lb.	15.65	17.60

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1 lb. lots., divd.:			
Green, FD&C, No. 1	lb	15 65	17 60
No 2	lb	19 60	22 85
No 3	lb	31.30	35.20
Red, FD&C, No. 2	lb.	3.30	4 10
No 3	lb	19 60	22 85
No 4	lb	5 55	7 50
Dyes, coaltar, certified colors for drugs and cosmetics 500-lb and 1-lb lots, divd.:			
Yellow, FD&C, No. 5	lb.	3.30	4.10
No 6	lb	3.30	4.10
Dyes, coaltar certified colors for drugs and cosmetics, 200-lb and 1-lb lots, divd			
Black, D&C, No 1	lb.	10.50	10.95
Brown, D&C, No 1	lb.	15.65	16.10
Green, D&C, No. 5	lb	15.65	16.10
No 6	lb.	15.65	16.10
No. 7	lb.	14.35	14.80
Orange, D&C, No. 3	lb.	10.50	10.95
No. 4	lb.	19.60	20.05
No 5	lb.	3.80	4.25
Red, D&C, No. 17	lb.	10.50	10.95
No 18	lb.	23.60	24.00
No 19	lb.	15.00	15.45
No 21	lb.	3.90	4.35
No 22	lb.	10.50	10.95
No 28	lb.	24.15	24.65
No 33	lb.	17.00	17.45
Violet, D&C, No. 2	lb.	15.65	16.10
Yellow, D&C, No. 7	lb.	10.50	10.95
No 8	lb.	10.50	10.95
No 10	lb.	13.05	13.50
No 11	lb.	13.05	13.50

MAKE WAX SPREAD BETTER



CIGARS SMOKE FINER



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Dyes—Ethylbenzene

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb. lots, dlvd.:

Blue, Ext., D&C, No. 1	lb.	15.65	16.10
Green, Ext. D&C No 1	lb.	15.65	16.10
Red, Ext., D&C, No 1	lb.	13.05	13.50
Yellow Ext. D&C No 1	lb	10.50	10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd. No.

11110 Brilliant scarlet BN	lb	1.79	—
13390 Fast blue SR	lb.	1.57	—
14025 Yellow 2G	lb	1.26	—
14030 Orange R, extra, conc.	lb	1.64	—
14645 Chrome black T	lb.	.77	—
14720 Rubine XX, conc	lb.	1.76	—
15510 Orange Y, extra conc.	lb.	.83	—
15575 Orange RR	lb	.99	—
15620 Fast Red A, conc	lb.	1.61	—
15705 Chrome blue black R, conc.	lb	1.12	—
16150 Scarlet 2RL	lb	1.22	—
16255 Brilliant scarlet 3RN, conc.	lb	1.26	—
16230 Fast light, orange 2G	lb	1.39	—
17590 Brown PG	lb	3.00	—
18050 Phloxine 2G	lb.	1.16	—
18055 Fuchsine 6B	lb	1.55	—
18965 Fast yellow 2G	lb	2.32	—
19140 Yellow XX	lb	2.48	—
19555 Yellow NN, conc.	lb	3.67	—
20170 Brown Y	lb	1.33	—
20470 Blue black, extra, conc	lb	1.51	—
21010 Brown, RX, conc	lb.	1.42	—
22240 Scarlet B	lb	2.81	—

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale of prototype), contract, dlvd. No.

22310 Red FC	lb.	1.57	—
22311 Brown MCW	lb.	1.59	—
22610 Blue 2B, extra conc	lb.	1.51	—
23500 Red. 4BX, conc.	lb.	1.80	—
24410 Sky blue FF, extra, conc.	lb.	1.95	—
24895 Brilliant yellow, conc.	lb.	3.27	—
26360 Navy blue 3R, conc.	lb.	1.84	—
26695 Black F, conc.	lb.	2.30	—
26900 Milling Red 3R, conc	lb.	2.24	—
27075 Neutral black 2B, conc	lb	2.75	—
27720 Gray L	lb.	2.18	—
29185 Fast scarlet 4BNC	lb	2.23	—
30015 Diazo black VJ conc.	lb.	2.48	—
30045 Yellow brown K, extra	lb.	1.45	—
30235 Black EB, 200%	lb.	1.33	—
30295 Green BY conc.	lb.	1.07	—
35660 Brown B	lb.	2.89	—
37565 Naphthol SWF	lb.	1.85	—
40000 Yellow 2G	lb.	1.44	—
41000 Yellow OX	lb	2.45	—
42000 Green V, crystals	lb.	2.73	—
42040 Brilliant green G crystals	lb.	3.62	—
42090 Blue EG	lb.	1.85	—
42100 Milling green 6B, conc.	lb.	4.78	—
42640 Violet 4BXN	lb.	2.43	—
43830 Brilliant blue, BBG	lb	2.44	—
44045 Blue B, extra conc.	lb.	3.61	—
45170 Red BX	lb	4.76	—
50415 Nigrosine SSJ	lb.	1.03	—
52015 Blue GXX	lb.	2.54	—
58005 Alizarin red SC	lb.	3.64	—
59700 Golden orange GFD, single paste	lb.	2.70	—
59710 Flaming orange 6RD double powder	lb.	4.90	—
59800 Dark blue BO, single paste.	lb.	2.28	—
59825 Jade green NC supra, double paste	lb.	1.75	—
61570 Alizarin green CG extra	lb	3.81	—
63010 Alizarin blue SAPG	lb	3.90	—
63615 Alizarin blue black B	lb	3.26	—
69825 Blue BLFD double paste	lb.	2.76	—
70800 Brown BR single paste	lb	2.03	—

Dyes, coaltar oil-soluble, 100-lb. drums, dlvd. No

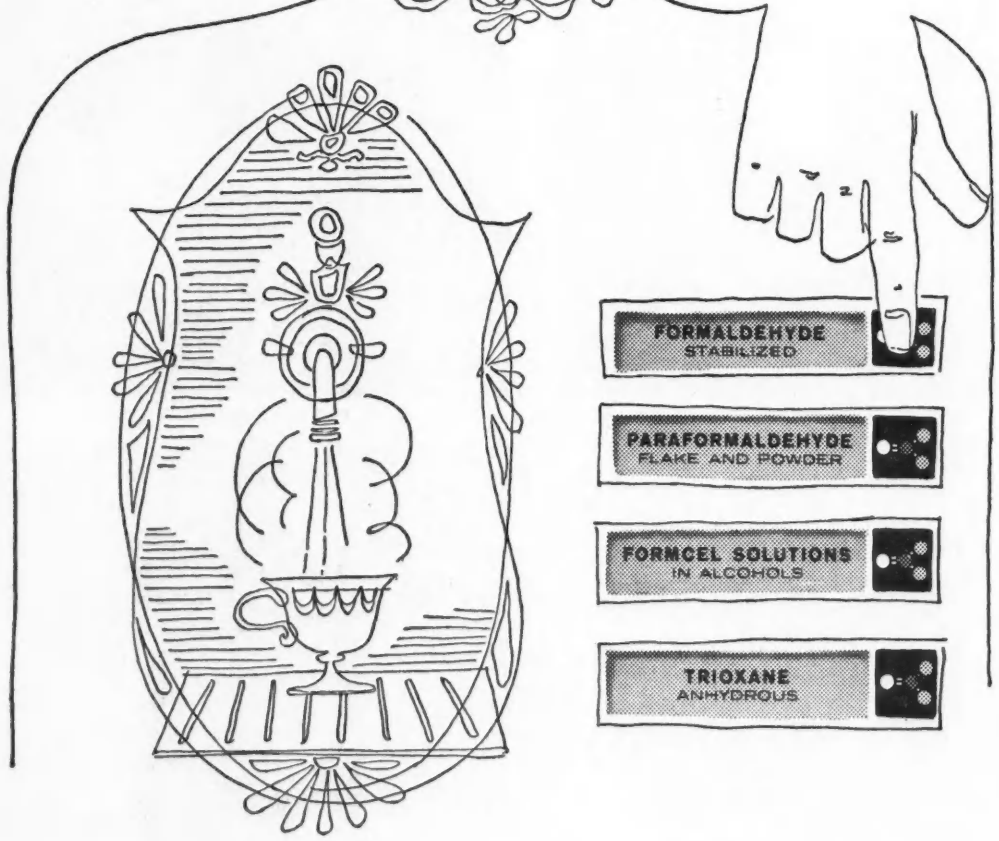
12140 Oil scarlet BL	lb	1.87	—
12055 Oil orange 7078 V	lb	1.38	—
26120 Oil red N 1700	lb	1.94	—
42535B Methyl violet base	lb	1.88	—
44045B Victoria blue base	lb	4.06	—
50415B Oil black 8603	lb.	.80	—
61565 Alizarin cyanine green base.	lb.	6.13	—

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd., Black RB

	lb.	3.89	—
Spirit brown GN	lb.	5.30	—
Spirit orange R conc.	lb.	5.87	—
Spirit red B conc.	lb.	6.41	—
Pr 517 Spirit yellow 2R conc	lb	4.62	—
Pr. 554 Spirit blue THN	lb.	5.06	—

E

Echinacea root, bls.	lb	1.25	—
Elm bark, grinding, bls.	lb	30	.32
Powd., bbls., ½s	lb.	.60	—
Select, bundles	lb	75	—
Emetine hydrochloride, USP bots.	oz.	48.40	—
Endrin, tech. dms., 100-lbs or more, 100% basis, dlvd	lb.	2.77	—



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Eosin red toner, bbls., works lb. 1.90 — **Ephedrine syn., USP, anhyd., bots.** 100-oz. lots oz. .98 1.00 **hydrous, bots., 100-oz. lots** oz. .92 — **Ephedrine hydrochloride, NF, dms., 100-oz., f.o.b. works** oz. .75 — **Ephedrine sulfate, USP, cryst., dms., 100-oz f.o.b works** oz. .73 — **USP, powd., dms., 100-oz., same basis** oz. .73 — **Epichlorohydrin, dms., c.l., dlvd** lb. .29½- — **dms., l.c.l., dlvd** lb. .31 — **tanks, dlvd** lb. .27 — **Epinephrine base, syn. USP, bots., 100 gram lots gram** .58 — **Epsom salt (see Magnesium sulfate). Erigeron oil cns** lb. 11.00 — **Ergot, NF, dms., tin-lined** lb. 2.00 2.50 **Eserine salicylate, bots** oz. 34.50 40.00 **Eserine sulfate, bots** oz. 86.90 — **Ester gum, gum-rosin type, dms., c.l. dlvd. Ill., Md. Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W Va** lb. .18½- — **Wood-rosin type dms. c.l., same basis** lb .18½- — **Ether (see specific product) Ethyl acetate, nat., ferment, 85-88%, dms. c.l. dlvd** lb .15 — **dms. l.c.l., dlvd** lb .16½ — **tanks dlvd** lb .12½ — **95-98% dms. c.l., dlvd** lb .15¼ — **dms. l.c.l., dlvd** lb .16¾ — **tanks, dlvd** lb .12¾ — **Ethyl acetate nat. ferment. 99%, dms., c.l. dlvd** lb .15½ — **dms. l.c.l. dlvd** lb .17 — **tanks, dlvd** lb .13 — **syn. 85-88% dms., c.l. dlvd** lb .15 — **dms. l.c.l., dlvd** lb .16½ — **tanks. dlvd** lb .12½ — **Ethyl acetate syn. 95-98%, dms., c.l. dlvd** lb .15¼ — **dms. l.c.l., dlvd** lb .16¾ — **tanks dlvd** lb .12¾ — **99% dms. c.l., dlvd.** lb .15½ — **dms., l.c.l., dlvd.** lb .17 — **tanks dlvd** lb .13 — **Ethyl acetoacetate, dms., c.l., dlvd.** lb. .58½- — **dms. l.c.l. dlvd.** lb .60 — **tanks, dlvd** lb .56 — **Ethyl acrylate, dms., c.l., t.l., dlvd.** lb. .34¾- — **dms., l.t.l., dlvd** lb. .35¾- — **tanks, dlvd.** lb. .32¼- — **Ethyl alcohol, 190 pf., USP, tax paid dms. c.l. dlvd E of Rockies** gal 20.63 — **dms. l.c.l. same basis** gal. 20 73 -20 84 **Ethyl alcohol, 190 pf., USP, tax-free, dms c.l. dlvd E of Rockies** gal 68 — **dms. l.c.l., same basis** gal. 78 .89 **tanks, same basis** gal 52 — **Ethyl alcohol, absolute 200 pf., tax paid dms dlvd E of Rockies** gal 21 75 — **dms. l.c.l. same basis** gal. 21 85 -21 96 **tanks same basis** gal 21 59 — **Ethyl alcohol, denatured (see Denatured alcohol, ethyl) Ethyl aminobenzoate USP (see Benzocaine). Ethyl amyl ketone, dms. c.l., dlvd.** lb .20 — **dms. l.c.l. same basis** lb. 21½ — **tanks same basis** lb 17½ — **Ethyl benzoate, bots.** lb .75 1.00 **Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E** lb .43 — **dms. l.c.l. frt alld E** lb .45 — **tanks, frt. alld. E** lb. .40 - — **2-Ethyl butyl alcohol, dms., c.l., works** lb .30 — **dms. l.c.l. works** lb. .30¾- — **tanks, works** lb .28 — **Ethyl butyl ketone, dms., c.l., t.l., works** lb. .36 — **dms. l.c.l., t.l. works** lb. .36¾- — **tanks works** lb. .34 — **Ethyl butyrate, dms., works** lb. .85 1.00 **Ethyl carbamate (see Urethane) Ethyl cellulose, vis. 4 cps., bgs., 5,000 lb lots or more, frt. alld E** lb. .73 - — **bgs. smaller lots frt alld E** lb. .75 - — **Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E** lb. .68 - — **bgs. smaller lots frt alld E** lb. .70 — **Ethyl chloride, tech. cyls., works.** lb. .20 .22 **dms. works** lb. .18 .20 **tanks works** lb. .10 — **Ethyl cinnamate, cns** lb. 3.15 3.35 **Ethyl ethanolamines, mixed, dms., c.l., dlvd E** lb. .43½ — **dms. l.c.l. dlvd E** lb. .44½- — **tanks dlvd E** lb. .41½- — **Ethyl ether, absolute, ACS, dms** lb. .27 — **Anesthesia USP dealers, 1-lb. cns** lb. 1.01 — **½ lb cns** lb. 1.09 - — **¼-lb cns** lb. 1.21 — **Indust. dms. c.l. dlvd.** lb. .13½- — **dms., l.c.l., dlvd. E** lb. .15 - — **tanks dlvd E** lb. .11 — **2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E** lb. .37 — **dms. l.c.l., t.l. dlvd. E** lb. .38½- — **tanks, dlvd E** lb. .34½- — **2 Ethyl hexoic acid, 1c higher W of Rockies. 2-Ethylhexyl acrylate, dms., c.l., t.l., straight or mixed frt. alld. E** lb. .39½- — **dms., l.t.l., same basis** lb. .40½- — **tanks, same basis** lb. .37 - — **2-Ethylhexyl alcohol, dms., c.l., dlvd. E** lb. .23¾- — **dms., l.c.l., dlvd. E** lb. .25¼- — **tanks, dlvd. E** lb. .21¼- — **Ethyl iodide, chys., works** lb. 3.30 - — **Ethyl methacrylate, dms., c.l., frt. equald** lb. .52 - — **dms. l.t.l. frt equald** lb. .52½- — **tanks, frt. equald** lb 50 - — **Ethyl morphine hydrochloride, USP. bots** oz. 11.85 — **Ethyl oenanthate, dms** lb 1.05 1.30 **Ethyl oxalate (see Diethyl oxalate) Ethyl silicate, dist. (see Tetraethyl orthosilicate). Ethyl silicate, 40% available SiO_2, dms., c.l., dlvd. E** lb. .44 - — **dms., l.c.l., dlvd. E** lb. .45½- — **tanks, dlvd. E** lb. .42 - — **N-Ethyl-a-naphthylamine, dms., works.** lb 1.04 - — **N-Ethyl-m-toluidine, tech., tq., tanks frt alld** lb .83 - — **N-Ethyl-o-toluidine, bbls** lb. .88 - — **Ethylamine (see Mono-, Di-, or Tri-) N-Ethylaniline, dms. c.l. frt. alld.** lb. .57 - — **dms. l.c.l., frt. alld** lb. .58 — **tanks, frt. alld** lb .55 — **Ethylbenzene, 99% dms., c.l., t.l., frt. equald** lb. .14 — **dms. l.c.l., same basis** lb. .16 — **tanks, same basis** lb. .11½- —

Ethylene, contract refy gats	lb	.3475	.3625
Ethylene dibromide dms., c.l., frt. equald	lb.	.30½	—
dms., t.c.l., frt equald	lb.	.31½	—
tanks, frt equald	lb.	.28½	—
Ethylene dichloride dms., c.l., divd.	lb	.11½	—
dms., t.c.l., same basis	lb.	.13	—
tanks, same basis	lb.	.09	—
Ethylene dichloride prices W of Rockies, 1c. per lb higher			
Ethylene glycol indust dms., c.l., divd E	lb.	.16	—
dms., t.c.l., same basis	lb.	.17½	—
tanks, same basis	lb	.13½	—
Ethylene glycol monobutyl ether, dms c.l. divd E	lb	.22	—
dms. t.c.l., divd E	lb.	.23½	—
tanks, divd E	lb.	.19½	—
Ethylene glycol monoethyl ether, dms c.l. divd E	lb	.21	—
dms., t.c.l., divd E	lb.	.22½	—
tanks, divd E	lb.	.18½	—
Ethylene glycol monoethyl ether acetate dms c.l. divd E	lb.	.19½	—
dms., t.c.l., divd. E	lb.	.2	—
tanks, divd E	lb.	.17	—
Ethylene glycol monomethyl etner, dms c.l. divd E	lb.	.21	—
dms. t.c.l. divd E	lb.	.22½	—
tanks, divd E	lb.	.18½	—
Ethylene glycol monomethyl ether acetate, dms., c.l., works	lb.	.29	—
	lb.	.29	—
dms., t.c.l., works	lb.	.29¾	—
tanks, works	lb.	.27	—
Ethylene glycol monostearate, flake, 150-lb ctn	lb.	.33	—
Ethylene oxide dms, c.l. divd E	lb.	.21½	—
dms., t.c.l., divd E	lb.	.24½	—
tanks divd E	lb.	.15½	—
Ethylene trichloride (see Trichloroethylene)			
Ethylenediamine 85-88%, dms, c.l., divd E., 100% basis	lb.	.42	—
dms t.c.l divd E 100% basis.	lb.	.43	—
tanks divd E., 100% basis	lb.	.40	—
Ethylvanillin, 100-lb. fib. dms., 500-lb.	lb.	6.75	—
less than 500-lb.	lb.	7.40	—
Eucalyptol, USP cns. dms	lb	.85	1.40
Eucalyptus oil NF rectified, 70-75% dms	lb.	.45	—
NF rectified, 80-85% dms	lb	.53	.69
Eugenol, tech., dms	lb.	0.00	—
USP, dms.	lb.	1.90	—
Euphorbia herb, bls	lb.	.12	.15

F

F salt paste tech dms, works	lb	2.30	—
Fennel oil, sweet, USP, cns.	lb.	2.60	—
Fenugreek seed, Argentine, ogs	lb	.15	—
French light bgs	lb	.16	—
Indian, light, bgs	lb.	.17½	—
Rumanian bgs	lb.	.14	—
Yugoslav light bgs	lb.	.16½	—
Fenugreek seed, Moroccan, bgs	lb.	.09	—
Ferric chloride, anhyd., tech., 350-lb. dms., c.l., works 100 lbs.		8.00	—
dms., t.c.l., works 100 lbs.		9.00	—
Ferric chloride, indust., cryst., bbls., c.l., works 100 lbs.		5.25	6.75
bbls. t.c.l. works 100 lbs		5.75	7.25
42° Be. photo grade cbys., c.l., works 100 lbs.		7.25	8.25
sewage grade, tanks, frt equald. 100% basis 100 lbs.		4.00	—
USP cryst dms t.l. works	lb.	.08½	—
Ferric citrate, gran., dms.	lb.	.88	—
Ferric hypophosphite, NF, 175-lb. dm	lb.	4.25	—
Ferric naphthenate liq., 6% Fe. dms. frt alld	lb.	.28¼	—
Ferric oxalate tech., gran. 50-lb. dm. f.o.b works E	lb.	.89	—
Ferric oxides (see iron oxides)			
Ferric phosphate NF soluble, gran pearls, cs	lb.	.72	.75
Ferric pyrophosphate, FCC VII soluble, gran. pearls, 225-lb. dm.	lb.	.79	—
Ferric resinate, dms., ton lots, frt. alld	lb.	.45	—
Ferric stearate dms. c.l. frt alld.	lb.	.39	—
dms. t.c.l., frt alld	lb.	.40	.44
Ferric sulfate, partly hydrated, bgs., c.l., works	ton.	35.25	—
bgs., t.c.l., works	ton.	36.25	42.25
bulk, c.l., works	ton.	33.25	—
Ferric-amonium citrate, NF, brown, gran., 100-lb. dms	lb.	.68	—
NF, green, gran., 100-lb. dms., frt. equald	lb.	.68	—
Ferric-ammonium oxalate, fine gran., dms	lb.	.27½	.29½
Ferric-potassium oxalate, fine gran., dms	lb.	.32½	.34½
Ferric-sodium oxalate, fine gran., dms	lb.	.27½	.29½
Ferrous gluconate, USP, 200-lb dm., frt. equald	lb.	.96	—
Ferrous sulfate, gran., bgs., c.l., works	ton.	34.50	—
bgs., t.c.l., divd Metropolitan area 100 lbs		3.35	4.25
bbls., c.l., works	ton.	40.00	—
bulk, c.l., works	ton.	27.00	—
USP cryst., bbls., dms	lb	09½	.10
Fir balsam, Canada, bbls	gal.	34.00	35.00
Oregon, bbls	gal.	3.40	4.64
Fish oil, Canada, cns	lb.	1.50	1.75
Fish oil, refd., alkali, dms.	lb.	.1300	.1350
Kettle-bodied, dms.	lb.	.1530	.1580
Light-pressed, dms.	lb.	.1150	.1200
tanks	lb.	.10	—
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram dms 1,000,000 units.		.12	—
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts	ton.	92.50	95.00
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts	ton.	88.00	—
Fleaseed (see Psyllium seed)			
Folic acid USP pots fib dms., kilo lots or more gram.		.25	—
10% feed grade fib dms. 5 kilos or more	kilo.	30.00	44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l. divd	lb.	.0695	—
tanks, divd.	lb.	.0405	—
Formaldehyde, methanol-free (uninhibited), tanks, divd	lb.	.0375	—
Formic acid 85% cbys. c.l., works.	lb.	.1570	—
cbys., t.c.l., works	lb.	.1620	.1720
90%, cbys., c.l., works	lb.	.1625	—
cbys., t.c.l., works	lb.	.1675	.1775
Fringetree bark, bls	lb.	.65	.70
Fumaric acid tech. 250-lb dms., c.l., frt. equald	lb.	.23¼	—
dms., t.c.l., frt equald	lb.	.24¼	—
Fumaric acid in bags ½c. per lb less			
Furfural, dms. c.l. works	lb.	.13	—
dms. t.c.l., works	lb.	.14	—
tanks, divd E	lb.	.11½	—
tanks, divd W	lb.	.12½	—
Furfuryl alcohol, cns., works	lb.	.28	—
dms., c.l., t.l., Newark, N J	lb.	.20½	—
dms., t.c.l. t.t.l., Newark N J	lb.	.21½	—
dms., c.l., t.l., Memphis, Tenn	lb	.19	—
dms., t.c.l. t.t.l., Memphis, Tenn.	lb.	.20	—
tanks, Memphis, Tenn.	lb.	.175	—

Fusel oil, refd. dms., c.l., divd	lb.	.12	—
dms., t.c.l., divd.	lb.	.10½	—
tanks, divd.	lb.	.15½	—

G

G salt, bbls., frt. alld., 100% basis	lb.	.73	—
Gallic acid, NF VII, bbls., 1,000-lb. lots	lb.	2.00	—
bbls., smaller lots	lb.	2.02	2.22
Tech., bbls., 1,000-lb. lots	lb.	1.78	—
bbls., smaller lots	lb.	1.80	2.00
Gamma acid, dry grd., bbls., frt. alld	lb.	1.73	—
Gammapicoline (see g-picoline).			
Garlic oil, dom., bots.	oz.	4.75	6.05
Imp. bots.	oz.	4.50	5.00
Gaultheria oil (see Wintergreen oil).			
Gelatin, edible 75 AOAC test, bbls., c.l., divd	lb.	.55	—
150 AOAC test, bbls., c.l. divd.	lb.	.64	—
200 AOAC test, bbls., c.l., divd.	lb.	.70	—
225 AOAC test, bbls. c.l. divd.	lb.	.74	—
275 AOAC test, bbls., c.l., divd.	lb.	.82	—
Gelsemium root, bls.	lb.	.30	.35
Gentian root, bls.	lb	.24	—
Grd., bbls., bxs	lb	.30	—
Powd, bbls, bxs	lb	.30	—
Geraniol extra, cns, dms.	lb	1.75	2.40
Soap grade dms	lb	.90	1.75
Standard cns. dms.	lb.	1.65	—
Synthetic dms	lb	1.30	—
Geranium oil, Algerian, cns	lb.	19.00	22.00
Bourbon, cns.	lb.	20.00	22.00
Geranium oil, Turkish (see Palmarosa oil).			
Geranyl acetate cns	lb	1.90	2.70
Synthetic dms	lb	1.45	—
Ginger oil, dist., bots.	lb.	11.50	14.00

Ginger oleoresin, NF, from African root, bots	lb.	4.25	5.00
NF, from Jamaican root, bots.	lb.	7.75	—
Ginger root, Cochin, bgs	lb.	.19½	—
Jamaican, No. 3, bgs	lb.	.28	—
Nigerian, split, bgs	lb.	.20	—
Sierra Leone, bgs	lb.	.35	—
Glauber's salt (see Sodium sulfate).			
Gluconic acid tech., 50% dms., c.l., t.l., f.o.b. works	lb.	.20	—
dms., t.c.l., f.o.b. works	lb.	.21	—
tanks, f.o.b. works	lb.	.17	—
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., divd	lb.	.16	—
131 jellygrams, bgs., c.l., same basis	lb.	.16½	—
164 jellygrams, bgs., c.l., same basis	lb.	.18½	—
Glue, bone, extracted, dry bone, 191 jellygrams, bgs., c.l., same basis	lb.	.19½	—
222 jellygrams, bgs., c.l., same basis	lb.	.21	—
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis	lb.	.16	—
86 jellygrams, bgs., c.l., same basis	lb.	.16	—
115 jellygrams, bgs., c.l., same basis	lb.	.16½	—
Glue, bone, green, 135 jellygrams, bgs., c.l., same basis	lb.	.17½	—
164 jellygrams, bgs., c.l., same basis	lb.	.18½	—
180 jellygrams, bgs., c.l., same basis	lb.	.19½	—
200 jellygrams, bgs., c.l., same basis	lb.	.20½	—

Bone glue, t.c.l., prices 2c. higher.			
Glue, hide, 70-94 jellygrams, bgs., c.l., divd	lb.	.18	—
95-149, bgs., c.l., divd	lb.	.19	—
122-149, bgs., c.l., divd	lb	.20½	—
150-177, bgs., c.l., divd	lb.	.22½	—
178-206, bgs., c.l., divd	lb	.25	—
Glue, hide, 207-236, bgs., c.l., divd	lb	.28	—
237-266, bgs., c.l., divd	lb	.30½	—
267-298, bgs., c.l., divd	lb.	.32½	—
299-330, bgs., c.l., divd	lb	.34½	—
331-362, bgs., c.l., divd	lb.	.36½	—
363-394, bgs., c.l., divd	lb	.38	—
Glue, hide, 395-427, bgs., c.l., dvld.	lb	.40	—
428-460, bgs., c.l., divd	lb.	.42	—
461-494, bgs., c.l., divd	lb.	.44	—
495-529, bgs., c.l., divd	lb	.46	—
Hide glue, t.c.l. prices 2c. higher.			
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld	lb.	1.80	—
fib. dms., 25-lb. lots, frt. alld	lb	1.88	—
l-Glutamine, bots., 1-9 kilo lots,	kilo.	150.00	300.00
Bots., 50-kilo lots	kilo.	100.00	—
Bots., 500-kilo lots	kilo	75.00	—
Glycerine, dom., nat., crude, saponification 88%, tanks divd.	lb.	.1670	.1760
nat., crude, soapiye, 80%, tanks, divd	lb.	.1520	.16
nat. refd., USP, CP, 99%, dms., c.l., divd	lb.	.28⅞	—
dms., t.c.l., divd	lb.	.29⅝	—
tanks, divd.	lb.	.27⅛	—

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IBI

Glycerine dom. nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .28 - —
dms., l.c.l., dlvd lb. .28¾ - —
tanks, dlvd. lb. .26¼ - —
nat. high gravity, dms., c.l., dlvd lb. .28¾ - —
dms., l.c.l., dlvd lb. .29½ - —
tanks, dlvd. lb. .27 - —
Glycerine dom. syn., dms., c.l., dlvd lb. .29 - —
dms., l.c.l., dlvd lb. .29¾ - —
tanks, dlvd. lb. .27¼ - —
Imp. nat. crude, soaplye, 80%, c.i.f lb. .15 - —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine)
Glycolic acid (see Hydroxyacetic acid).
Glycolonitrile 70% aqueous, dms., c.l., t.l., works lb 40 - —
dms., l.c.l., same basis lb. 42 - —
tanks, same basis lb. .39 - —
Glyoxal, 30%, dms., c.l., works lb. 20½ - —
dms., l.c.l., works lb. .21¼ - —
tanks, works lb. .18 - —
Golden seal root, NF, tested, bls. lb. 2.90 - 3.00
Gramicidin, 1 to 5 kilos, f.o.b. works, gram. 4.25 - —
Grapefruit oil, dms lb. 2.75 - 2.90
Graphite, amorp., powd., bgs., fib. dms., ex whse lb. .06 - .09½
Cryst., 88-90% powd., bgs., fib. dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
Graphite, 95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 .31
No. 2, 90-95%, bgs., fib. dms., ex whse lb. .29 .31
Grease, white, choice all hog, tanks, dlvd lb. .69¾ Nom.
Yellow, tanks, dlvd lb. .06¼ - .06⅝
Grease oil, No. 1, dms., c.l., f.o.b. Chicago lb. .11½ - —
dms., l.c.l., same basis lb. .13½ - —
tankcars, same basis lb. .10 - —
Extda winter, strained, dms., c.l., Chicago lb. .14½ - —
dms., l.c.l., same basis lb. .16½ - —
tankcars, same basis lb. .13 - —
Prime, burning, dms., c.l., same basis, Chicago lb. .16½ - —
dms., l.c.l., same basis lb. .18½ - —
tankcars, same basis lb. .15 - —
Other areas ¾c. higher, except Texas and West Coast, 1¼c. higher.

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls. lb. .40 —
Guaiacol, NF, crys., dms., tins lb 2.10 2.15
Guaiacol, NF, liq., cbys., dms. lb. 3.30 - 3.40
Guaiacwood oil, cns. lb. .49 - .50
Guaiacol carbonate, NF VII, dms lb. 3.40 - 3.45
Guar gum, edible, bgs., c.l., f.o.b. shipt. pt lb. .38 - —
bgs., l.c.l. same basis lb. .40 - .42
Indust., bgs., c.l., same basis lb. .32 - —
Tech., bgs., c.l., same basis lb. .30 - —

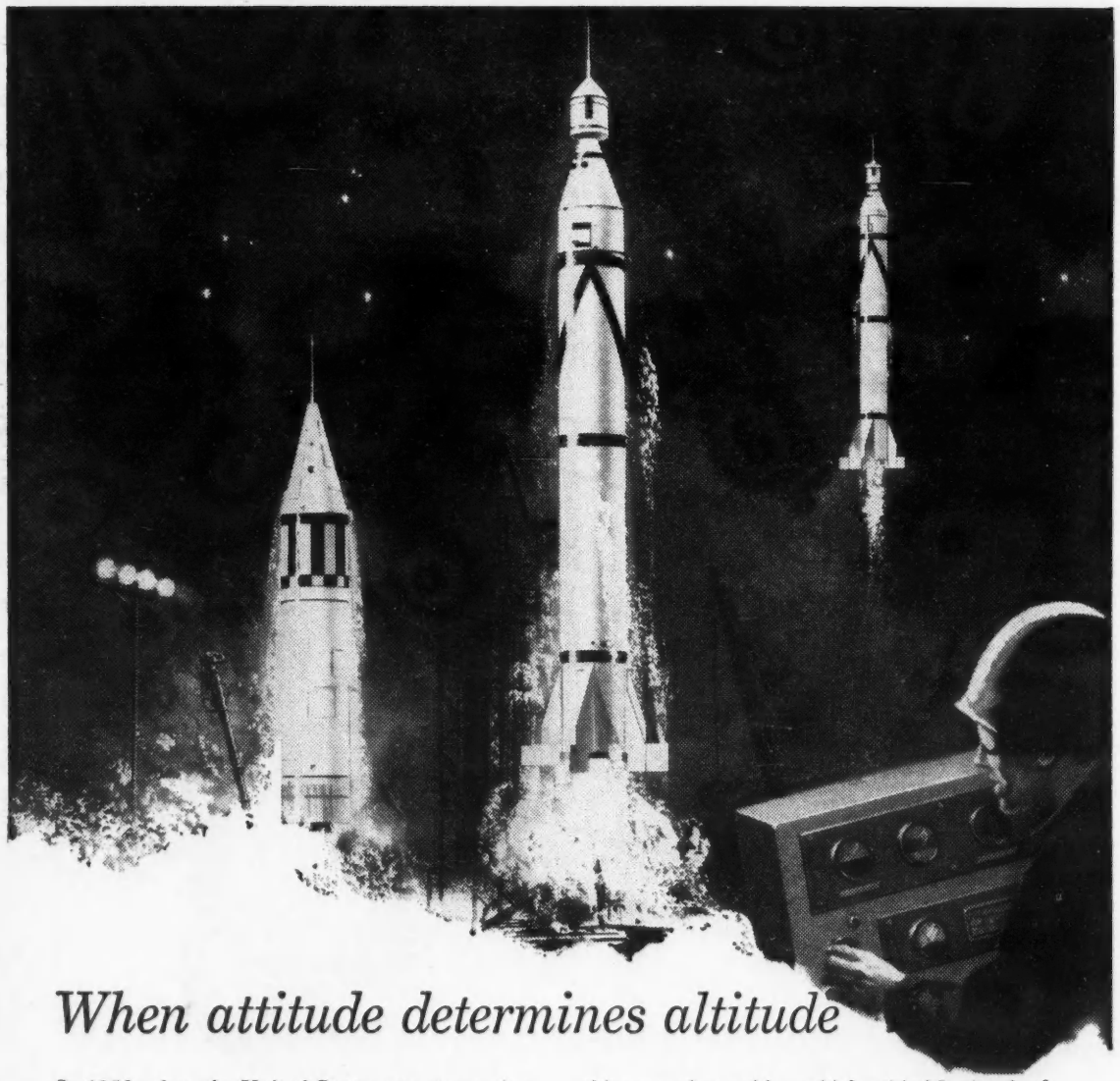
GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

H

H acid, dry, bbls, c.l., frt. alld., 100% basis lb. 1.00 - —
bbls., l.c.l., same basis lb. 1.05 - —
Hansa yellow 10 G, bbls., dlvd. E. of Rockies lb 2.45 —
Hansa G yellow, pigment, bbls. lb. 2.20 - —
Hawthorn berries, bgs. lb. .18 - .20
Heliotropin 100-lb lots, dms. lb. 2.60 3.40
Hellebore root dom. green, bls lb 70 .75
Helonias root bls lb. 1.50 - —
Hemlock oil, cns. lb. 2.55 - 3.00
Henbane leaves, bls lb. .40 - .45
Heptachlor dms, c.l., t.l., frt. alld., 100% basis lb. .98 - —
Heptane, indust., tankcars, New Jersey and New York gal. .20 - —
Houston Texas gal. .1625- —
Hesperidin, purif., 50 kilos, f.o.b. works kilo. 19.70 - —
Hesperidin methylchalcone, 50 kilos, f.o.b. works kilo. 49.25 - —
Hexachlorophene dms., 1,100 lbs. or more lb. 1.84 - —
dms., to 1,100 lbs. lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York City lb. .333 - —
Hexamethylenetetramine, tech., bgs., 1,000-19,999-lb. lots, same basis lb. .343 - —
bgs., smaller lots, same basis lb. .353 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .350 - —
fib dms., smaller lots, same basis lb. .353 - —
Hexamethylenetetramine, USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia lb. .42½ - —
bgs., smaller lots, same basis lb. .43½ - .48½
Hexane, industrial, tankcars, New Jersey and New York gal. .20 - —
Houston Texas gal. .16 - —
1-Hexanol, dms., c.l., works lb. .35 - —
dms., l.c.l., works lb. .35¾ - —
tanks, works lb. .33 —
Hexyl cinnamic aldehyde, dms. lb. 3.95 - 4.00
n-Hexyl methacrylate, dms., c.l., works lb. .75½ - —
dms., l.c.l., works lb. .76 - —
Hexyl salicylate, dms. lb. 1.70 - 1.75
Hexylene glycol, dms., c.l., dlvd lb. .17½ - —
dms., l.c.l., dlvd. lb. .19 - —
tanks, dlvd. lb. .15 - —
Hexylresorcinol, USP, dms., 25-lb. lots or more dlvd lb. 14.00 - —
dms. smaller lots, dlvd lb. 14.50 - —
Homatropine hydrobromide, USP, bots oz. 3.25 - —
Homatropine methylbromide, USP, bots oz. 3.00 - 3.25
Hoofmeal, 17-18% ammonia bulk, c.l., Chicago unit-ton. 6.75 - —
Horehound herb, bls. lb. .18 - .20
Hydrastis (see Goldenseal).
Hydrazine hydrate, 85% ret. dms., works lb. 1.35 - 1.55
100%, ret. dms., works lb. 1.60 1.90
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works lb. 2.92 - —
Hydroabietyl alcohol, tech. solid, dms., c.l., dlvd. zone 1 lb. .29¼ - —
dms., l.c.l., dlvd. zone 1 lb. .29¾ - .30¼
tanks, dlvd. zone 1 lb. .27¼ - —
Zone 1 for hydroabieyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.
Hydrobromic acid, medicinal, 48%, cbys., frt equald lb. .48 - .56
Hydrochloric acid, anhyd (see Hydrogen chloride)
Hydrochloric acid, 18° cbys., c.l., works 100 lbs 2.50 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs 2.90 - 3.05
tanks, works, frt. equald ton 28.00 - —
20°, cbys., c.l., works 100 lbs 2.75 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs 3.15 - —
tanks, works, frt equald ton 30.00 - —
Hydrochloric acid, 22° cbys., c.l., works 100 lbs 3.25 - —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs 3.65 - —
tanks, works, frt equald ton 35.00 - —
Hydrochloric acid CP, USP, consumers, cbys., extra, c.l., works lb. .15¾ - —
cbys., l.c.l., same basis lb. .17¼ - .17¾
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis, lb. .20¾ - —
Hydrocortisone acetate, bulk, bots., kilo lots or more gram. .95 - —
Hydrocortisone alcohol, bulk, bots., kilo lots or more gram. 1.00 - 1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pint bots., f.o.b. works, pint. .70 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal dms., c.l., t.l., dlvd 100 lbs 19.25 - —
55-gal. dms., l.c.l., t.l.l., dlvd 100 lbs 20.75 - —
20-gal. dms., c.l., t.l., dlvd 100 lbs 21.00 - —
Hydrofluoric acid, aqueous, 70%, 20-gal., dms., l.c.l., t.l.l., dlvd 100 lbs 22.50 - —
tanks, works frt equald 100 lbs 13.40 —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery
Hydrofluosilicic acid, dms., works, 30% basis lb. .07 - —
Hydrofuramide, dms., fib ctns., works lb. .30 - .40
50-lb cyls., t.c.l., works lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., t.c.l. works lb. .45 - —
Hydrogen cyanide, liq., 98% tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½ - .32½
cyls., dlvd W lb. .39 - —
tanks, works lb. .18 - —
Hydrogen peroxide, 35%, dms., c.l., dlvd lb. .202 - —
dms., l.c.l., dlvd. lb. .211 - —
tanks, dlvd lb. .1800- —
Hydroquinone, photo grade, dms., 50-lbs. f.o.b works lb. 1.10 —
Tech., dms., c.l., dlvd lb. .82½ - —
dms. l.c.l. dlvd lb. .84½ - —
Hydroquinone monomethyl ether, dms., t.l. dlvd lb 2.59 - —
dms., l.t.l., dlvd lb. 2.61 - —
Hydroxyacetic acid, tech., 70% dms. Philadelphia and Chicago lb. .11 - —
tanks Belle W Va lb .073 —
Hydroxycitronellal, cns. lb. 5.70 - 6.00
Hydroxyethyl cellulose, all grades, fib. dms. 20,000-lb lots or more, f.o.b shipping point lb. .84 - —
fib. dms., 2,000 to 19,999-lb lots, same basis lb. .89 - —
fib. dms., 100 to 1,999-lb lots, same basis lb. .93 - —
fib. dms., smaller lots, same basis lb. 1.03 - —
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots oz. 7.75 - 8.50
Hyoscyamine sulfate, bots oz. 7.75 - 8.50
Hypophosphorous acid, purif., 50%, 10-cbys. f.o.b works lb 1.95 - —
NF, 50%, 10-cbys., same basis lb. 1.35 - —

I

Ichthammol, NF, dms. lb. .75 1.06
Indigo (see Dyes, coaltar, 1171 indigo, syn.)
Indole, CP bots. lb. 13.75 - 15.00
Inositol, 50-100 lb. dms., 1,000 lbs or more, dlvd lb 4.50 - —
Inositol, 50-lb. dms., less than 1,000 lb., dlvd lb 4.75 - —
10 lb cns., 10-50 lbs. dlvd lb 5.00 - —
5 lb. bots., dlvd. lb 5.25 - —
Insect flowers (see Pyrethrum)
Iodine, crude, kgs. lb. 1.10 - —
Resub., USP, dms., f.o.b. works lb. 2.20 - 2.23



When attitude determines altitude

In 1958, when the United States was attempting to put its first satellite in orbit, the Jupiter missile was selected as the power plant for one of the shoots. The Jupiter had the power required and the direction control to maintain the precise angle of ascent so the final stage would reach the desired altitude.

To achieve this control, small gas generators, fueled by Becco 90% H_2O_2, were clustered around the body of the missile. Jets of oxygen, generated by H_2O_2, and steam spouting from the sides served as rudders which guided Jupiter back on the desired path whenever it began to stray. Result: Explorer I had the proper attitude and went into a precise orbit at the proper altitude.

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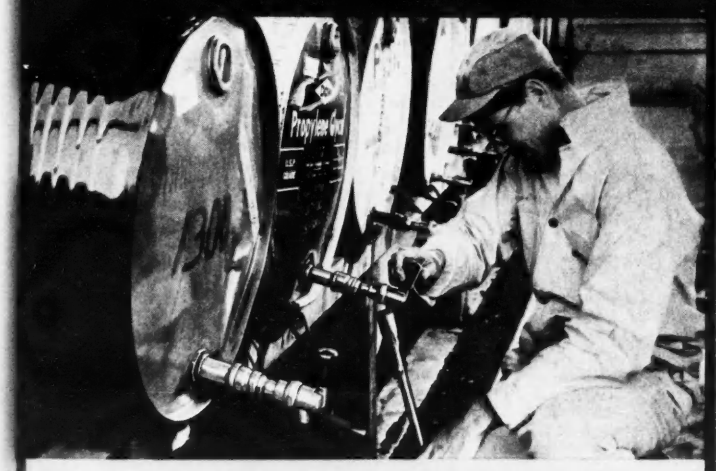

#1. LIQUID DISPENSING AT AN EASTMAN KODAK SOLVENT STORAGE AREA. ALL DRUMS REST ON COPPER STRIPS TO GROUND THEM AGAINST STATIC SPARKS. FOR ADDED PRECAUTION, DRUMS ARE CLIPPED TO GROUND LINES AND METAL SOLVENT RECEPTACLES.

#2. MORE THAN 200 SOLVENT STORAGE DRUMS AT EASTMAN KODAK'S, ROCHESTER, NEW YORK PLANT. EACH DRUM IS TAPPED WITH AN ECONOMY STAINLESS STEEL FUME-TIGHT FAUCET WITH TEFLON * SEALS.

DESCRIPTION

The Economy chemical faucet, Model U-009, is the result of over 25 years' experience in the design and manufacture of liquid-dispensing faucets. Fabricated of corrosion-resistant materials and designed for the ultimate in safety, the unit is ideal for dispensing flammable and corrosive fluids which include solvents, essential oils, chlorine-free bleaches, oxidizing agents, caustic solutions and many acids. Economy chemical faucets are in use throughout the chemical, pharmaceutical, food, graphic arts, photographic, textile and plastic industries.

OPERATION

Economy chemical faucets are in use in individual and central dispensing systems in laboratory, production and liquid storage areas. The faucets can be used for drum dispensing or installed in standard piping systems.

To dispense liquids, the faucet handle is pulled forward manually against coil-spring pressure. The faucet is self-closing which insures positive shut-off when not held open.

(continued on reverse side)

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advantages

• NO AFTER DRIP Teflon "O" ring seals which are inert to most fluids, cannot swell or decompose to cause leakage. There is no loss of costly liquids, nor hazard from dripping liquids.

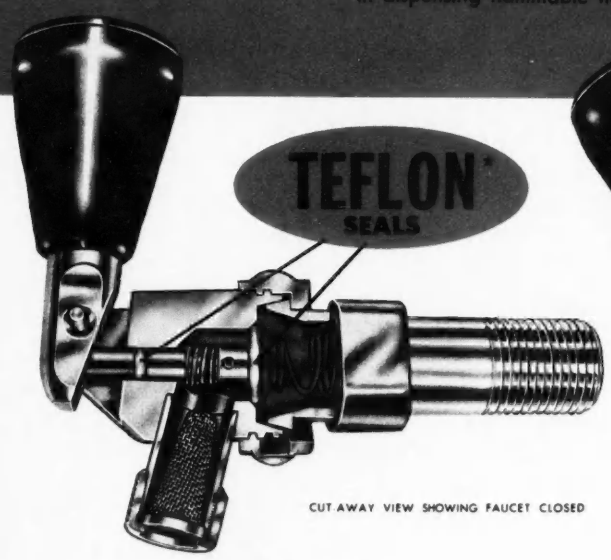
• EASE OF DISPENSING Opening against coil-spring pressure, the faucet insures positive shut-off when not manually held open. A guard prevents the faucet from being jammed in the open position.

• DESIGNED FOR SAFETY An anti-flash screen prevents flame propagation in the dispensing of flammable solvents.

• EASILY CLEANED Originally designed for sanitary operation, thorough cleaning can be accomplished in a matter of minutes without special tools. Because of materials of construction, the unit can be chemically and/or steam sterilized.

• LOW MAINTENANCE Simple design with corrosion-resistant parts assure long life and virtually no maintenance problems.

• FACTORY MUTUAL APPROVED Your assurance of quality construction and safe operation is the stamped approval on each faucet. From a safety standpoint, after exhaustive tests the Factory Mutual Engineering Division of Factory Mutual Laboratories approved the Model U-009 for use in dispensing flammable liquids in Factory Mutual Insured Plants.



CUT-AWAY VIEW SHOWING FAUCET CLOSED

CUT-AWAY VIEW SHOWING FAUCET OPEN

design and construction

Thousands of faucets in use throughout the world have proved the superiority of the Economy design. Stainless steel contact parts assure corrosion resistance and the absence of product contamination. "O" ring seals of Teflon mean long-lasting, dependable, drip-proof service. For the ultimate in safety, the faucet spout has been fitted with a stainless steel flame arrester to prevent flames from reaching the liquid storage through the spout. In addition, a guard around the shank prevents the operator from jamming the faucet in an open position.

Economy chemical faucets can be furnished with either ⅜", ½" or ¾" straight or tapered interchangeable shanks in stainless steel or chrome plated brass. A swivel connection between the faucet body and the spout enables the user to thread the unit into an opening and then adjust the spout to the desired position.

The faucet is made in two sections so that the dispensing end may be removed for easy chemical or steam sterilization, while the shank remains as a permanent installation in the drum. A stainless steel screw cap with Teflon seal is available as optional equipment to seal the shank. With this two-piece assembly, the drum can be moved without danger of damaging the faucet.

CF. 1257 Printed in U.S.A.

ECO ENGINEERING DIVISION
ECONOMY FAUCET CO.
12 New York Ave., Newark 1, N. J.
Phone: MArket 4-6565
Export Office: ECO Engineering Co.
Empire State Bldg., New York 1, N. Y.

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First Class Permit No. 2297, Newark, N. J.

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12 NEW YORK AVENUE
NEWARK 1, N. J.

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Iodochlorohydroquinolin, USP, dms. lb. 3.00 • —
Iodoform, NF, dms., 300-lbs., f.o.b. works lb. 4.90 • —
dms., 100-lbs., same basis lb. 5.05 • —
a-Ionone, cns. lb. 4.60 - 5.75
b-Ionone, cns. lb. 4.15 - 6.15
Ipecac root, whole, bgs. lb. 8.00 - 8.50
Powd., bbls., bxs. lb. 9.50 -10.00
Irish moss, bleached, prime, bls. lb. .25 - .27
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .60 • —
bbls., l.c.l., ton lots, same basis. lb. .61 • —
bbls., smaller lots, same basis. lb. .62 • —
Dom., reg. bbls., c.l., dlvd. E lb. .55 • —
Iron blue, alkali-resisting, dom., reg., bbls., c.l., ton lots, same basis lb. .56 • —
bbls., l.c.l., smaller lots, same basis lb. .57 • —
Imp., British, reg., bbls., c.l. dlvd. E lb. .48 • —
bbls., l.c.l., ton lots, same basis lb. .49 • —
Iron blue, British, reg., bbls., l.c.l., smaller lots, same basis. lb. .50 • —
Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N. M., Ariz., Mont. Wyo. Utah, Col and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works lb. .15 —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05½- —
Iron oxide, Persian Gulf, red., bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem, E. St. Louis, New York City lb. .14¼- —
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom.
bbls., l.c.l., ex whse, New York. lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¾- .07
Peruvian type, bgs. l.c.l lb. .023 .024
Iron oxide, yellow, pure, light lemon shade bgs. c.l. works lb. .12¼- —
other shades, same basis lb. .12 - .12½
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
dms., l.c.l., same basis lb. .29 • —
tanks, same basis lb. .25 - —
Isoborneol cns lb. 1.44 - 1.80
Isobornyl acetate cns lb. 46 56
Isobornyl formate, dms lb. 1.15 - 1.20
Isobornyl propionate, dms lb. 1.20 - 1.25
Isobutyl acetate, perfume grade, cns lb. .30 - .35
Isobutyl acetate, solvent grade, dms., c.l., dlvd E. of Rockies lb. .15¼- —
dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd lb. .15½- —
dms., l.c.l., dlvd. lb. .17 • —
tanks, dlvd lb. .13 • —
Isobutylene, 99% tanks, works gal. .38 • —
Isobutyl isobutyrate, dms., f.o.b. works lb. .75 • —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd. lb. .28½- —
Tech., dms., c.l., dlvd. lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb. .19½- —
Isobutyric acid, dms., c.l., t.l., dlvd. lb. .35 - —
dms., l.c.l., t.l., same basis lb. .36½- —
t.c. t.t., same basis lb. .33 - —
Isobutyronitrile, dms., c.l., dlvd. lb. .47½- —
dms., l.c.l., dlvd lb. .48½- —
tanks, dlvd. lb. .45 - —
Isoeugenol cns. lb 3.40 4.25
Isoniazid, powd., bulk, 50 kilos kilo. 12.00 • —
Isonicotinic acid, 100-lb fib, dms., works lb. 4.25 • —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd. E. lb. .25 • —
tanks, dlvd. E lb. .21 - —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy gal. .16½- —
Isophorone, dms., c.l., dlvd lb. .24½- —
dms., l.c.l., dlvd lb. .25¼- —
tanks, dlvd. lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .18 - .19
dms., l.c.l., same basis lb. .19 - .20
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., dlvd. lb. .14 • —
dms., l.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd gal. .58 • —
dms., l.c.l., dlvd. gal. .68 • —
tanks, dlvd. gal. .42 • —
Isopropyl alcohol, refd., 95%, c.l., dms., dlvd gal. .60 • —
dms., l.c.l., dlvd. gal. .70 • —
tanks, dlvd. gal. .44 • —
Isopropyl alcohol, anhyd., c.l., dlvd. gal. .62 • —
dms., l.c.l., dlvd. gal. .72 • —
tanks, dlvd gal. .46 • —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd. lb. .09½- —
dms., l.c.l., dlvd. lb. .11 • —
tanks, dlvd lb. .07 • —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l. t.l., works lb. 1.00 - —
dms., l.c.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb fib dms., c.l., t.l., works lb. .75 - —
450-lb fib dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 1.25
Itaconic acid, refd, bgs, c.l., f.o.b. works lb. .39½- —
bgs., l.c.l., same basis lb. .41 - .43
Tech., bgs., c.l., same basis lb. .34½- —
bgs., 500-lbs. same basis lb. .36 • —

J

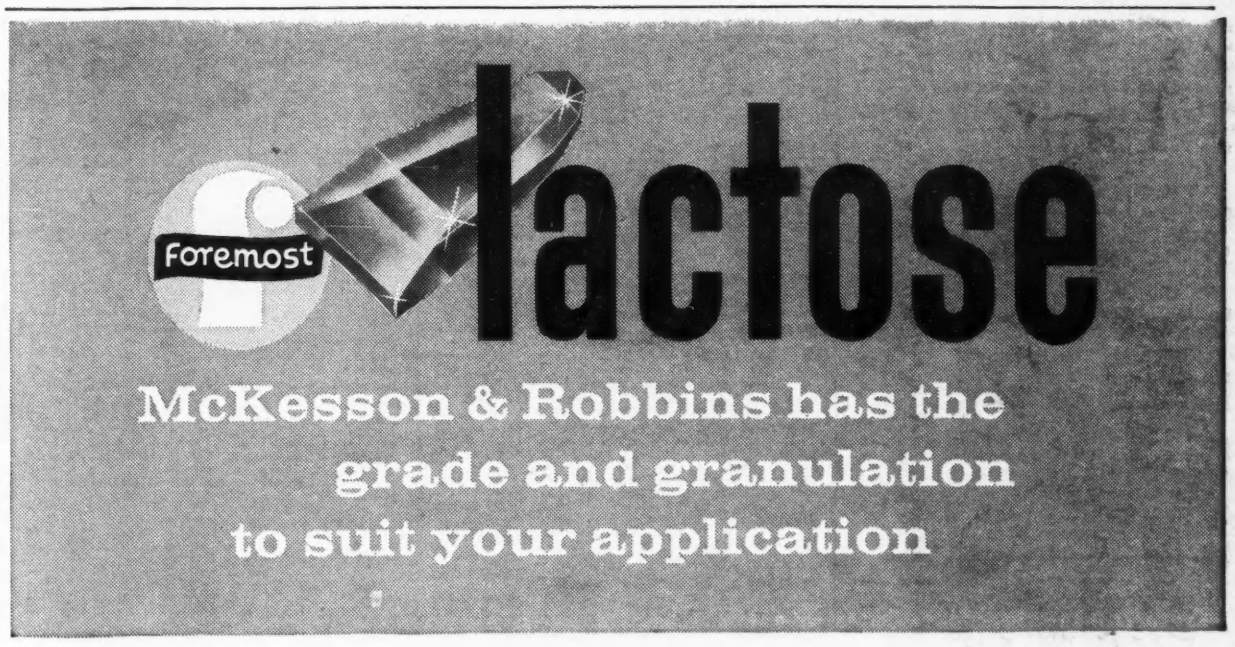
J acid, paste, bbls., works, 100% basis lb. 2.70 • —
Powd., bbls. same basis lb. 2.75 • —
Jalap root, NF, bls lb. .55 - .60
NF, powd., bbls., bxs lb. .65 - .70
Japan wax, cs lb. .29 - .31
Juniper berries, bgs. lb. 16 - .17
Juniper berry oil, NF, bots. lb. 2.90 - 3.75
Twice rectified, bots. lb. 3.25 • —
Juniper tar oil, NF, dms lb. .42 - .60
Juniper wood oil, tech, cns. lb. .38 - .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd, fib dms lb. .10 - .12
NF, colloidal, 50-lb. bgs. lb. .15¼- .17½
Karaya gum, No. 1, NF, powd., bls lb. .48 - .50
No. 2, powd., bbls. lb. .43 - .45
No. 3, powd., bbls. lb. .37 - .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .11 - .12

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 gal. .15125- —
Houston, Texas gal. .16 - —
Lacquer diluent, petroleum, 200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 gal. .14125- —
Houston, Texas gal. .16 - —
Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more, frt. equald lb. .2035- —
bbls., dms., 5 to 19, frt. equald. lb. .2085- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —
Lactic acid, edible, 80%, bbls., c.l., dms., frt. equald lb. .3335- —
bbls., dms., 20 or more, frt. equald lb. .3385- —
Lactic acid, edible, 80%, bbls., dms., 5 to 19, frt. equald lb. .3435- —
bbls., dms., 1 to 4, frt equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls., 5 to 19, works lb. .2840- —
Lactic acid, plastic grade, 50%, c.l., bbls., 1 to 4, works lb. .2890- —
80%, bbls. c.l. works lb 4025- —
bbls., 5 to 19, works lb. 4725- —
bbls., 1 to 4, works lb 4775- —
Lactic acid, tech., 44%, bbls., c.l., works 100 lbs. 12.45 - —
bbls., t.c.l., works 100 lbs. 12 85 - —
USP, 85%, cbys. lb. 85 - —
Lactose, crystalline, edible, bgs., 23,000-lb lots, frt equald lb. .14 - —
bgs., 6,000-lb lots, frt equald lb. .14½- —
bgs., 2,000-lb lots, frt equald lb .14¾- —
bgs., 200-lb lots, frt equald lb 15¼- —
Edible lactose in fib dms, ½c higher
Lactose, ferment, grade, bgs., c.l., works lb. .08¾- —
Lactose, USP, reg., fib dms., 30,000-lb lots, frt equald lb. .21½- —
fib. dms., 2,000-lb lots, frt. equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c to 1c lower
Lactose, USP spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., t.t.l., frt. equald lb .19 .19¾
Lady's slipper root, bls lb. 3.00 3.50
Lamp black, bgs., c.l., works lb. .16 - .45
Lanolin, USP, anhyd., 400-lb dms., works lb. .24 - .26
USP, annyd., cosmetic, 400-lb dms., works lb. .26 - .30
USP, hydrous, 400-lb dms., works lb. .20 - —
Lard, cash, dms., Chicago lb. .1390- —
Lard oil (see Grease oil).
Larkspur seed bgs lb .55 —
Laurel leaf oil dms, cns. lb 9 75 12 50
Laurent's acid bbls lb 70 —
Lauric acid, pure, dms lb. .30¼- 32¾
bags lb. .28¾- .31¼
tanks lb. .27¾- —
Lauryl alcohol, bots lb 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works lb 65½ —
dms, t.t.l., works lb 63 —
Lavandin oil, 22-24%, dms. lb. 1.15 - —
Abrial, dms. lb. 1.20 — —
Lavender flowers, medium, bls lb 55 60
Ord., bls lb 20 25
Select., bls lb .90 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb 1.85 4.00
40-42% ester, cns lb 5.00 7.75
Spike, Spanish, cns lb. 1.75 2.00
Lead acetate, NF cryst., gran., powd., bbls lb. .34½- —
White, cryst., bbls. lb. .25½ —
gran., bbls. lb. .26½ —
powd, bbls lb. .26½ —
Lead arsenate acid powder, dealers, 3-50-lb bgs or any quantity frt. alld on $150 or more lb .30½- —
1-lb bgs., same basis lb. .47 —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt. alld lb .17 —
bbls., l.c.l., same basis lb. .18 - —



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Lead carbonate (see Lead, white, basic carbonate)
Lead chloride, 400-lb. fib. dms. lb. .56 - —
Lead iodide NF V tars lb 3.82 - —
Lead linoleate, fused, 26.5% Pb, dms. lb .38 - —
Lead metal, prime, pigs, New York. lb. .11 - —
St. Louis lb. .1080- —
Lead monosilicate, bgs., c.l., works, frt equald lb. .1385- —
bgs. l.c.l., same basis lb. 1485- —
Lead naphthenate, liq., 16% Pb., dms dlvd lb. .19½- —
24% Pb. dms., dlvd lb. .24¼- —
Solid, 37% Pb., dms dlvd lb .31¾ —
Lead nitrate, tech., cryst., 400-lb. fib. dms lb. .2675- —
Lead orthosilicate gel, 50-60% PbO, dms works lb. .29¾ .34¼
Lead peroxide tech powd., bbls lb. .45 - .50
Lead phthalate dibasic dms. works. lb. .41 - —
Lead, red 95% Pb_3O_4 or less, bbls., c.l. works, frt equald. lb. .1375- —
bbls., l.c.l., same basis lb. .1475- —
Lead, red, 97% Pb_3O_4, bbls., c.l., same basis lb. .1375- —
bbls., l.c.l., same basis lb. .1475- —
Lead, red, 98% Pb_3O_4, bbls., c.l., same basis lb. .1410- —
bbls., l.c.l., same basis lb. .1510- —
Lead, resinate precip., 23%Pb dms., lb. .49 - —
Lead salicylate, normal dms. works lb .46 —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b mfrs point, frt alld lb .20 - —
bgs., l.c.l., same basis lb .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate liq, 16% Pb, dms lb .17¼- —
24% Pb, dms lb. .21¼- —
Solid, 30% Pb, dms lb. .26¾- —
Lead, white, basic carbonate, bgs., c.l. shipt pt., frt. alld lb. .18 - —
bgs. l.c.l same basis lb. 19 - —
basic silicate bgs. c.l., shipt. pt frt alld lb. .16½- —
Lead white, basic silicate, bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs., l.c.l., same basis lb. .18 - —
Lecithin, edible, tech., bleached, non-ret dms., c.l. works. lb. .14 - .15
non-ret dms. l.c.l., same basis lb. .15 - .16
Lecithin, edible, tech., unbleached, non ret dms. c.l. same basis lb. .13 - .14
non-ret dms. l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 50 kilos, f.o.b. works kilo.14.20 - —
Lemon oil, USP, Calif., cns., dms lb 1.25 1.50
Messina cns lb 3.25 4.00
Lemongrass oil, cns., dms lb 2.45 - 2.50
dl-Leucine, dms., 1 kilo, works kilo.50.00 - —
Licorice root, gran bls lb 13 —
Powd. bls lb 15 .16
Whole bls lb 09 .10
Lignaloe wood oil, Mexican, cns lb 2.75 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate)
Lilac oil lb 1.500.00
Lime, chemical (quicklime), bulk, c.l. 50,000 lbs works, E ton.14.25 - —
Chemical, hydrated, bgs., c.l. same basis ton.17.25 —
spray, bgs. c.l. same basis ton.18.25 —
For New York delivery add $6.29 freight charge
Lime oil, dist., Mexican, dms lb. 5.00 - 5.60
West Indian, dms lb. 5.00 - 5.60
Expressed, West Indian, dms lb. 6.50 - 7.75
Lime salts (see Calcium)
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite)
Linalool ex bois de rose oil, dms lb 2.45 4.25
Syn, 98-100% dms, works lb 3.40 2.75
Linalyl acetate ex bois de rose 90-92% dms lb 2.65 4.50
96-98% dms lb 3.25 —
Syn, 98-100% dms, works lb 2.75 - —
Lindane, 25% formulation, to distributors dms, frt, alld lb. 1.35 1.50
Lindane, tech, to formulators, 250-lb dms, 5,000 lbs, dlvd, lb 2.13 - —
100-lb dms, 5,000-lbs, dlvd lb 2.15 - —
250-lb dms, less than 5,000-lbs, dlvd lb 2.18 —
100-lb dms, less than 5,000-lbs dlvd lb 2.20 —
Linden flowers, with leaves bls lb .35 .40
Without leaves bls lb .42 .45
Linseed meal, expeller, 32% bulk, Minneapolis, mills ton.61.50 - —
Extracted 34% bulk, same basis ton.57.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1670- —
dms., l.c.l., New York lb. .1760- .1810
tanks, f.o.b. Minneapolis lb. .1310- —
tanks, New York lb. .1422- —
tankwagon, New York lb. .1472- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acid, dist., dms lb. .2075- —
Water white, dms lb. .2425- —
Litharge, comi., powd, bbls., c.l., works, frt. equald lb. .1325- —
bbls., l.c.l., same basis lb. .1425- —
Lithium aluminum hydride, tump, dms, works lb.33.00 39.00
Lithium benzoate, dms lb 1.65 1.87
Lithium bromide, NF, gran, bgs, works, frt equald lb 2.60 —
Lithium carbonate, NF, dm, ton lots lb. .58 - —
dms., 1,999 lbs. or less lb. .64 - —
Tech., dms., ton lots lb. .57 - —
dms., 1,999 lbs. or less lb. .63 - —
Lithium chloride, CP, annyd., dms., ton lots lb. 1.23½- —
Tech, anhyd, dms, c.l., t.l., dlvd, or works, frt alld lb .87 —
dms, l.c.l., same basis lb .98 .93
Lithium citrate, NF, dms, ton lots, lb 1.50 —
Lithium fluoride, dms., 20,000-lb. lots, dlvd lb. 1.75 - —
bbls., ton lots and more, dlvd lb. 1.85 - —
bbls., less ton lots, dlvd lb. 1.90 - —
Lithium hydride, powd, dms, 500-lbs lots or more, works, lb 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .60 - —
dms., l.c.l., frt. alld lb. .64 - —
Lithium manganite, dms, works lb 95 1.05
Lithium nitrate, tech, dms., 100-lb lots lb 1.15 1.25
Lithium salicylate, dms lb 1.60 1.70
Lithium silicate, dms, works lb 1.10 1.20
Lithium stearate, dms, c.l. works lb. 47½ —
dms, ton lots, works lb. 48½- —
dms, less-ton lots, works lb 53½- —

Lithium sulfate, dms., 100-lb. lots, c.l. lb. 1.15 1.25
Lithium titanate, dms., works lb. 1.15 1.25
Lithol red toner, barium, bbls., works lb. 1.03 - —
Lithol-rubine red toner, pure, bbls., works lb. 1.65 - —
Resinated, bbls., works lb. 1.47 - —
Lithopone, ord, bgs., c.l., dlvd E. lb. .08¾- —
bgs., l.c.l., dlvd, E lb. .09½- —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs., l.c.l., dlvd lb. .12 - —
Lobelia herb, bls lb. .95 - 1.10
Loheline sulfate, bots., 50-oz. lots, works oz.30.00 - —
Locust bean gum, powd., bgs. lb. .35 - .46
Lycododium, cs. lb. 2.50 - 3.00
1-Lysine monohydrochloride, 25-lb. dms lb. 4.95 - —

M

Mace, Siauw, No. 1, bls. lb. 1.58 - —
No. 2, whole, bls. lb. 1.40 - —
siftings, bls lb. 1.35 — —
Mace oil, dist., cns., dms lb 9.00 - 11.00
Magnesia, calcined, tech., bgs., c.l., frt equald lb. .25¾- .26½
Tech, syn., rubber grade, light, bgs., c.l., frt. equald lb .28¾- .30
rubber grade, extra light, bgs., c.l., frt. equald lb. .28 —
bgs., l.c.l., frt. equald lb. .28¾- —
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85% bgs. c.l., f.o.b Lunning, Nev ton.39.50 - —
91%, bgs., c.l., same basis, ton.49.50 - —
95%, bgs., c.l. same basis ton 59.00 - —
USP, light, bgs. lb. .36½- .37½
USP, heavy, bgs lb. .36½- .37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt equald ton.86.25 - —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chawelah, Wash ton.46.00 - —
Magnesium bromide, 80-lb. dm., f.o.b. works lb. 1.15 - —
Magnesium carbonate, tech, bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt equald lb. .13½- .14
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt equald lb. .14 —
bgs., l.c.l., frt equald lb. .15 16
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l. works lb. .12¾- —
dms., l.c.l., works lb .14 .15
Magnesium chloride, hydrous, 99%, flake, bgs., c.l., works ton.60.00 —
bgs., l.c.l., works ton.75.00 -100.00
Magnesium gluconate, 100-lb dm., f.o.b works, E lb. 1.42 —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b works lb. .24½- .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., t.l.l., frt alld lb. .23½- —
tanks, frt alld lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, frt alld on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate, tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc)
Magnesium silicofluoride, dms., works lb .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 —
bgs, l.c.l., works 100 lbs. 2.90 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs, l.c.l, 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs., smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib dms., 5,000-lb. lots lb. .38 - —
fib dms, 1,000-lb lots lb. .40 - —
fib dms., 100-lb lots lb. .45 - —
Bulky and super grades of magnesium trisilicate 7c. per lb. higher.
Malachite green, straight, PTA, bbls., works lb 5.30 - —
Malathion, dms., c.l., works lb. .89 —
dms., l.c.l., works lb .92 1.01
Maleic acid, cryst, powd, dms lb .37¼ —
Maleic anhydride, dms, c.l. frt. equald lb. .24 —
dms, t.c.l. frt equald lb. .25½- —
tanks, frt equald lb .22½ —
Maleic anhydride in bags ½c. per lb less.
Malic acid, tech., dms lb. .50 —
Mandelic acid, NF, dms., 1,000-lb lots lb 2.35 —
dms, smaller lots lb 2.40 2.50
Mandrake root, bls lb. .45 —
Manganese acetate, dms., dlvd lb. .35 —
Manganese borate, tech., fib dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb lots and more, works lb. .19 .16
Manganese chloride, CP, anhyd., dms., 20,000-lb lots, works lb. .21¾ —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb lots, burlap paper lined bgs., gross for net works ton.148.00 —
40,000 to 99,999-lb lots, paper bgs., same basis ton.144.50 —
40,000 to 99,999-lb lots, dms same basis ton.152.50 -
Prices for manganese dioxide in 10,000 to 40,000-lb lots, $3 per ton higher
Manganese gluconate, dms lb. 1.84 - —
Manganese hydrate, dms., dlvd lb 35 - —
Manganese hypophosphite, NF dms. lb. 3.52 —
Manganese linoleate, liq, 4.35% Mn, dms lb. .35¾- —
Solid, precip., 8.2% Mn, bbls lb. .41¼ —
Manganese metal, electrolytic, dms., c.l., dlvd, E lb. .34½- —
dms., ton lots, dlvd E lb. .37 - —
dms., smaller lots, dlvd E lb. .39 - —

Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .29¼- —
Manganese resinate, fused, 3½% Mn dms lb. .29¼- —
Precip., 6½-7% Mn, dms. lb. .42 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd, S., E ton.86.50 - —
bgs., t.c.l., dlvd, S., E ton.93.50 - —
Manganese tallate 6% dms lb. .26½- —
Manila copal gum, C, bgs lb. .35 - .39
DBB bgs. lb. .25 - .28
DK, dust, bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 - .24
WS, bgs lb. No stocks.
Mannitol, com'l fib dms., ton lots, works lb. .60 - —
fib dms., to ton lots, works lb. .62 - —
fib dms., single dm., works lb. .65 - —
Marine pitch, dms lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .26½- —
bgs., l.c.l., works lb. .28 - —
Menadione, USP bots. gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. Sea. b. .06½- —
Menthol, nat. USP, Brazilian, large crys., cs. lb. 8.40 - —
Nat., USP, Brazilian, regular crys., cs. lb. 8.25 - —
Japanese cs. lb.10.50 -12.00
Syn., USP, racemic, 25-lb. lots lb. 4.25 - —
2-Mercaptobenzothiazole, bgs., fib, dms., ton lots, works, frt, alld lb. .44 - —
bgs. fib, dms., less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 - —
bgs. fib dms. less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 100 lbs., f.o.b works lb. 4.03 - —
USP, gran or powd., 50-lb. dm., 100 lbs., f.o.b works lb. 3.78 - —
Mercuric cyanide, NF VIII powd., fib dms lb. 5.84 - —
Mercuric iodide, red, NF, 100-lb. dm, f.o.b works lb. 6.97 - —
Mercuric oxide, red NF IX, 50-lb. dm, 100 lbs, f.o.b works, lb. 4.73 - —
tech., 50-lb dm, 100 lbs., same basis lb. 4.52 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis, lb. 4.89 - —
tech., dms, 100 lbs lb. 4.35 - —
25-lb. fib dm lb. 4.38 - —
Mercurous chloride (see Calomel).
Mercurous iodide, yellow, NF 100-lb. dm, f.o.b works lb. 8.22 - —
Mercury, ammoniated (see White precipitate USP XV)
Mercury metal, 76 lbs. per flask, net-flask.208.00 -211.00
Mesityl oxide, dms., c.l., dlvd lb .15 —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd lb. .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms, works lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine)
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, frt equald lb. .42½- —
dms, smaller lots, frt equald, lb. .43 - .75
tanks, works, frt equald lb. .40 - —
Methanol, nat, denaturing grade, tanks, frt alld gal. .85 - —
Syn, zone 1, dms., c.l., or t.l. min, dlvd gal. .51½- —
dms, t.c.l., dlvd gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b terminal gal. .29 - —
Methanol, syn., zone 2, dms, c.l., or t.l., min, frt. alld or dlvd, gal. .55½- —
dms., t.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min., dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b works, frt. equald lb.21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b works, frt equald lb.27.25 - —
Methenamine (see Hexamethylene-tetramine).
Methionine, hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt alld. lb 1.10 - —
dms., t.t.l., same basis lb 1.16 - —
dl-Methionine, fib dms., frt. alld., 50-lb or more lb. 3.50 - —
Feed grade, 98% fib dms., same basis lb. 1.43 - —
Methoxychlor, 50% wettable powder, dealers dms. cs lb. .66 - —
Methyl abietate, non-ret dms., c.l., dlvd zone 1 lb. .21½- —
non-ret dms., t.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret dms., c.l., dlvd zone 1 lb. .23½- —
non-ret dms., t.c.l., same basis, lb. .24 .24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Methyl acetone, nat, dms., t.c.l., E of Miss, frt alld gal. .62½- —
Methyl acetone, syn, dms, c.l, frt, alld E gal. .66 - —
Methyl acetone, syn., dms., t.c.l., frt. alld. E gal. .76 - —
tanks frt alld E gal. .51 — —
Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd, lb. .35½- —
dms., t.t.l., dlvd lb. .36½- —
tanks, dlvd lb. .32¼- —
Methyl alcohol, (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd, E lb. .17 - —
dms., t.c.l., dlvd, E lb. .18½- —
tanks, dlvd, E lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd, lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl amyl ketone, dms., c.l., t.l., f.o.b. works lb. 1.99½- —
dms., l.c.l., same basis lb. 2.00 - —

N-Methylaniline, tech., tanks, frt. alld lb. .60 - —
Methylanthranilate, cns. lb. 2.25 2.45
Methyl benzoate, cns., dms. lb. .60 .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .72
on 100 lbs lb. .73 - .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 - —
Methyl cellulose, standard vis. (15,-400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb bgs., 2,000-lb lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld.
Methyl chloride, indust. cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Methyl chloride, refrigerator mfrs., cyls., dlvd lb. .48¾- —
Other consumers or service men, cyls., dlvd lb 67¾ —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 —
dms., t.c.l., works lb. .45¾- —
tanks, works lb. .43 — —
Methyl formate, refd., dms lb. .35 .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
α-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .24 - —
100-lb. multiwall paper bgs., t.l., min 23,000 lbs., works lb. .25 - —
100-lb. multiwall paper bgs., l.t.l., works lb. .26 - —
Methyl heptin carbonate, bots lb.27.75 -31.00
Methyl p-hydroxybenzoate, fib dms. lb. 1.90 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 3.85
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 —
dms., t.c.l., dlvd. lb. .20½- —
tanks, dlvd. lb. .17½- —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W Va lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 — —
Methyl naphthyl ketone, cryst., cns lb. 2.45 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate)
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West
Methyl roseaniline chloride, NF., 5-lb fib. dms lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., t.c.l., same basis lb. .62½ 67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm lots or more, f.o.b. works lb. 1.32 - —
5-39 dm lots, same basis lb. 1.37 - —
tanks, same basis lb. 1.27 - —
Methyl violet toner, molybdated, PMA bbls., dlvd, E of Rockies lb. 2.95 - —
Tungstated, PTMA, bbls., same basis lb 4.35 - —
Methyl violet prices 1c. higher W. of Rockies.
Methylene blue, fib, dms., 100-lb. lots, frt, adjusted lb. 4.67 - —
Methylene chloride, tech, straight or assorted, dms., c.l. or t.l., dlvd lb. .12½- —
dms, t.c.l., t.t.l. dlvd lb. .15¾- —
tanks, 4,000-gal. min., dlvd lb. .11¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb 90 —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite, bgs., c.l., works, frt. alld.E lb. .06½- —
bgs. t.c.l., ex-whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld E. lb. .08¼- —
bgs. t.c.l., ex-whse or freight alld. E lb. .09 - —
Mica, wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs. t.c.l., ex-whse, or frt. alld. E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld.E lb. .08¾- —
bgs., ex-whse or frt. alld E. lb. .09 — —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. 08¼ —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c higher
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 .11
laminating grades, tankcars, works lb. .11 .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white tech, 50-65 vis., non ret dms., c.l., f.o.b. refy gal. .65 — —
50-65 vis. non-ret dms., t.c.l., basis gal. .70 - —
tankscars, refy gal. .49 - —
Mineral oil, white tech, 65-75 vis., non-ret. dms., c.l., same basis gal. .65 - —
non-ret. dms., t.c.l., same basis gal. .70 - —
tankcars, refy gal. .49 - —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .66 - —
non-ret. dms. t.c.l., same basis gal. .71 - —
tankcars, refy gal. .50 - —
Mineral oil, white, NF, 135-138 vis., non-ret. dms., c.l., same basis gal. .73 - —
Mineral oil, white, NF, 135-138 vis., non-ret dms., t.c.l., same basis gal. .77 - —
tankcars, refy gal. .56 — —
Mineral oil, white, NF, 145-155 vis., 5 non-ret. dms., c.l., same basis gal. .78 — —
non-ret dms., t.c.l., same basis gal. .83 — —
tankcars, refy. gal. .63 — —

Mineral oil, white, USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .80½- —
non-ret. dms., l.c.l., same basis gal. .85½- —
tankcars, refy gal. .64½- —
Mineral oil, white, USP, 200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .82½- —
non-ret. dms. l.c.l. gal. .87½- —
tankcars, refy gal. .66½- —
Mineral oil, white, USP, 340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .87½- —
non-ret. dms., l.c.l. gal 92½- —
tankcars, refy gal. 71½ —
(For f.o.b N. Y add 2c. for tankcars; 2c. for c.l., and 3c for l.c.l non-ret. dms.).
Mineral orange, American, bbls., c.l., works lb. .16 · —
bbls., l.c.l., same basis lb. .17 · —
Mineral spirits, petroleum, odorless, tankcars New Jersey gal. .29 · —
New York gal. .305 · —
Houston, Texas gal. .25 · —
regular tankcars, New Jersey and New York gal. .18 —
Group 3 gal. .12875- —
Houston, Texas gal. .145 —
Mineral spirits, 140 F. flash, New York, New Jersey at terminal gal. .205 · —
Houston Texas gal. .17 · —
Mink oil, dms lb 2.75 · —
Mirbane oil (see Nitrobenzene)
MNPT maroon toner kgs., c.l., works lb. 6.30 · —
Molasses, blackstrap feed trade, tanks, New Orleans gal. .13 - .13¼
tanks, New York gal. 13½- .16
Molybdated orange bbls lb. .49 —
Molybdenum metal, powd. 80 or 200 mesh ctns. works kilo 7.84 · —
325 mesh ctns. works kilo 9 13 · —
Molybdenum trioxide purit., dms., works lb. 1.15 · —
Tech. chemical dms., works, basis Mo content lb. 1.48 · —
Tech. metallurgical, dms., works, basis Mo. content lb. 1.47 · —
Molybdic acid, 84%, dms., works, lb. 1.05 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 —
dms., c.l., dlvd lb. .995 · —
tanks, dlvd lb. .96 · —
Monobutylamine dms., c.l., dlvd E. of Rockies lb. .57½- —
dms., l.c.l. same basis lb. .59 · —
tanks same basis lb. .55 · —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 · —
dms. l.c.l., works lb. .56 · —
tanks, works lb. .54 · —
Monochloracetic acid, purif. (see Chloroacetic acid mono).
Monochlorobenzene, dms., c.l., frt. alld or dlvd E lb. .10½- —
dms., l.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monochlorobenzene prices in the West 1¾c. higher.
Monoethanolamine dms. c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis lb. .29 · —
tanks, same basis lb. .25 · —
Monoethylalphanaphthylamine (see n-Ethyl-a-naphthylamine).
Monoethylamine 70% aqueous, solution dms., c.l., dlvd. E. 100% basis lb. .38½- —
dms., l.c.l. dlvd E 100% basis. lb. .40 · —
tanks dlvd E., 100% basis lb. .35 · —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine)
Monoisopropanolamine dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis lb. .29 · —
tanks, same basis lb. .25 · —
Monoisopropylamine anhyd., dms., c.l., dlvd lb. .33½- —
dms., l.c.l. same basis lb. .35 · —
tanks, same basis lb. .31 · —
Monomethylamine, anhyd., cyls., l.c.l. frt equald., 100% basis lb. .30 · —
tanks, 100% basis lb. .26 · —
30-35% soln., dms., c.l., frt, equald. 100% basis lb. .36 · —
Monomethylamine, 30-35% soln., dms. l.c.l., frt equald, 100% basis lb. .36½- —
tanks, frt equald 100% basis, lb. .26 · —
40% soln. dms. frt equald., 100% basis lb. .33 · —
dms., l.c.l. frt equald. 100% basis lb. .33½- —
tanks, frt equald, 100% basis lb. .26 · —
Monopentaerythritol, tech., bgs., c.l., dlvd E lb. .31 · —
bgs., l.c.l., dlvd E lb. .32 · —
Monopotassium glutamate, dms., 1,000-lb lots, frt alld lb. 3.05 · —
dms. 100-lb lots same basis lb. 3.25 · —
Monosodium glutamate dms. dlvd. lb. 1.07 1.15
Monosodium phosphate (see sodium phosphate, monobasic)
Montan wax Calif refd., bgs lb .27 .28
Imp., crude, Bohemian, bgs lb. .25 · .26
German, bgs lb. .25 · .26
Morphine, cns. 100-oz. f.o.b works. oz. 12.35 · —
Morphine hydrobromide, cns., 100-oz., f.o.b works oz. 9.90 · —
Morphine hydrochloride, NF, cns., 100-oz., f.o.b works oz. 9.90 · —
Morphine sulfate, USP, cns., 100-oz., f.o.b works oz. 9.90 · —
Morpholine, dms., c.l., dlvd E lb. .55¼- —
dms., l.c.l., dlvd, E lb. .56¾- —
tanks, dlvd E lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn. ambrette, fib dms., 100-lb lots lb. 4.40 4.90
cns., 25-lb lots lb. 4.50 5.00
Ketone fib dms., 100-lb lots lb. 4.60 5.10
cns., 25-lb lots lb. 4.70 5.20
Xylol, fib dms., 100-lb lots lb. 1.26 —
cns., 25-lb lots lb. 1.40 · —
Mustard seed Danish yellow, bgs. lb. .10 · —
Montana, yellow bgs lb. .10½- —
Oriental, bgs lb. .09 · —
Mustard oil, syn. bots lb. 1.60 1.85
Myristic acid, bgs lb. .23¼- .25¾
tanks lb. .22¼- —
Myrrh gum, cs lb. .65 .75

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Naphtha, high solvency (see Solvent naphtha, petroleum)
Naphtha, petroleum, cleaner's (see Cleaner's naphtha)
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal. .19 · —
Group 3 gal. .13875- —
Houston, Texas gal. .155 —
Naphthalene, crude, dom., 78°, tanks, frt. equald lb. .06¼- .07
imp., 78° bgs. large lots lb. 09½ Nom.
Refd. indust. chipped, crushed, bgs., frt. equald lb. .14½- —
tanks, same basis lb. .11¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis, lb. .15½- —
cs., 50 lbs., c.l., same basis. lb. .15¾- —
1-lb pkgs., c.l., same basis. lb. .18½- —
a-Naphthol, dms., frt. alld lb. 1.02 · —
b-Naphthol, tech. flake bbls., c.l., works lb. .34 · —
bbls., l.c.l., works lb. .36 · —
Naphthol, ITR, red toner, bbls., works lb. 5.00 · —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid)
1-Naphthol-5-sulfonic acid (see L acid)
1-Naphthol-5-sulfonic 8-amino acid (see S acid)
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid)
a-Naphthylamine, dms., frt. alld lb. .52 · —
b-Naphthylamine tech. flake bbls., works lb. 1.60 · —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid)
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid)
Naringin, fib dms lb. 8.50 —
Neatsfoot oil, 15° cold test, dms lb. .29 Nom.
20° cold test dms. lb. .28 Nom.
30° cold test, dms. lb. .27 Nom.
Neocinchophen, USP, dms., frt, adjusted lb. 7.00 · 8.00
Neomycin sulfate, fib dms., 1-kilo basis activity gram. .25 · —
fib. dms. 100-999-gram lots, basis activity gram. .30 · —
Tech., fib. dms. gram. .13½- —
Neopentylglycol, dms., c.l., dlvd lb. .32 · —
dms. l.c.l. same basis lb. .33 · —
Nerol, dms. lb 4.75 —
Neroli oil, NF, French, bots. lb. 425.00 - 575.00
Tunisian, bots. lb. 400.00 —
Nerolin, cns. lb. 2.45 2.85
Neville and Winther's acid, dms., frt alld lb. 1.40 · —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .68½- .75½
Nickel carbonate bbls., dlvd lb. 78¼- .85¼
Nickel chloride bbls. dlvd lb. .37 · .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 .73
Nickel metal, electro cathodes, cs., works lb .74 —
Nickel nitrate, dms., frt. alld lb. .31½- .33½
Nickel oxide, black, bbls. lb. .85 —
Green, bbls lb. .84 · —
Nickel sulfate, bgs., c.l., dlvd lb. .28 · —
bgs., l.c.l., dlvd. lb. .28½- .36
Nicotinamide, USP, 50-kilo, dms., 100 kilos., dlvd kilo. 5.75 · 6.50
dms., less than 100 kilos. dlvd. kilo. 6.25 · 7.00
Nicotinamide hydrochloride, 50-kilo dms., dlvd kilo. 6.50 · 7.50
Nicotine sulfate 40%, dealers, 50-lb. dms frt alld lb 1.20 · —
40%, manufacturers, 500-lb. dms., frt alld lb 1.03 · —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb .10¼- —
Nikethamide, cbys. lb 5.00 —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs 5.75 —
cbys., l.c.l., works E 100 lbs 6.05 6.85
38° Be., cbys. c.l. works E 100 lbs 6.25 —
cbys., l.c.l., works E 100 lbs 6.55 7.35
40° Be. cbys. c.l., works E 100 lbs 6.75 —
cbys., l.c.l., works E 100 lbs 7.05 7.85
42° Be., cbys., c.l. works E. 100 lbs 7.25 —
cbys., l.c.l., works E 100 lbs 7.55 8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs 3.90 —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs 4.90 —
Nitric acid, CP, NF consumer, cbys., extra, c.l., works lb. .18½ —
cbys. extra l.c.l works lb 20 —
5-pint bots. extra cs. c.l. same basis lb 22½ —
5-pint bots. extra cs. l.c.l., same basis lb 24 25
dms. frt alld lb 99 —
4-Nitro-2-aminophenol, tech., paste, dms., l.c.l., works lb. .64 · —
m-Nitroaniline, cryst., dms., frt alld lb 1.15 —
Paste, dms., frt. alld., 100% basis. 1.10 · —

One oil guarantees
full lemon flavor
every single time
It's Exchange Lemon Oil U.S.P., California Cold Pressed. Here is lemon flavor as it should be—full of the aromatic pungency of California's best lemons. And it's uniform—the same, batch after batch. Only the Sunkist Growers, with the world's largest stocks of coastal, highland and desert-grown lemons at their command, could produce an oil with such consistent flavor balance.
Always look for "Exchange" on the tamper-proof container seal—your guarantee it was pressed and packed by the Sunkist Growers. You can depend on it.
Sunkist Growers
Products Sales Department, Ontario, California
Exchange Brand Lemon Oil is distributed in the U.S. by Dodge & Olcott, Inc.; Fritzsche Brothers, Inc.; Ungerer & Co.
Exchange

o-Nitroaniline, flaked, dms, t.l., frt. dms., t.t.i. frt alld lb .49 - —
allid lb .51 - —
o-Nitroaniline orange toner kgs. lb 1.50 - —
p-Nitroaniline, c.l., t.l., dms., 20,000 lb min., dlvd lb. .44½- —
dms, t.c.l., same basis lb. .46½ —
o-Nitroanisole tech. tanks frt alld. lb .36 - —
p-Nitroanisole, tech. solid, dms., frt allid lb .72 - —
Nitrobenzene, dbl dist., dms., c.l., frt allid lb .13 —
dms., t.c.l. frt. allid lb .14 - —
tanks, frt allid lb .12 - —
p-Nitrobenzoic acid, dms., c.l., works lb .63 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼ ½ ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l. works lb. .37½ —
bbls., t.c.l., same basis lb. .33½ 40½
18-20 cps., bbls. c.l., same basis lb .39½ —
bbls., t.c.l., same basis lb. 40½ .42½
250-400, 600-1,000 seconds, bbls., t.c.l. same basis lb. 43 .46
Nitrocellulose spirit soluble 30-35 cps. ¼ ½ seconds bbls., c.l. same basis lb 43 - —
bbls. t.c.l., same basis lb 44 —
5-6 cps., 40-60 seconds nbls., c.l. same basis lb 42 —
bbls. t.c.l., same basis lb 43 .45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene dms. c.l., frt. allid lb .15 - —
dms., t.c.l., same basis lb 16 —
tanks, same basis lb 13 —
p-Nitrochlorobenzene dms. lb .28 .32
2-Nitro-p-cresol, tech. dms., dlvd lb .88 —
Nitroethane dms. c.l. dlvd E lb .25 - —
dms. t.c.l., dlvd E lb 25½ —
tanks dlvd E lb 22½ —
Nitroethane prices West of Rockies are 1c. higher
Nitrogen solutions, direct application, tanks, f.o.b. works unit-ton 1.64 - —
Manufacturing type, same basis, unit-ton 1.32 - —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 —
Cyls. t.l., min 5 tons, same basis lb .07½ —
Cyls. t.c.l. t.l.t. same basis lb. .15 —
Nitrogenous process tankage, bulk, works unit-ton 4.50 5.00
Nitrogenous sewage sludge bulk, f.o.b. Chicago works unit-ton 3.50 —
(The foregoing price is per unit NH_3, plus 50c, per unit, a.p.a., bulk, f.o.b. producers' works, Chicago.)
Nitromethane dms t.l., dlvd E lb .25 —
dms t.l.l. dlvd E lb 26½ —
Nitromethane prices West of Rockies are 1c higher
α-Nitronaphthalene bbls. frt allid. lb .31 - —
o-Nitrophenol dms. works, frt equald lb .94 - —
p-Nitrophenol dms. c.l. frt allid lb .45 —
1-Nitropropane dms c.l. frt allid E of Rockies lb .47 —
dms. t.c.l. same basis lb .23½- —
tanks same basis lb .25 —
2-Nitropropane dms c.l. frt allid E of Rockies lb .31 —
dms t.c.l. same basis lb .18½ —
tanks same basis lb .20 —
Nitropropane prices West of Rockies are 1c per lb higher lb .16 —
m-Nitrotoluene tech dms. frt allid, lb .50 - —
o-Nitrotoluene dms. c.l., frt. allid lb .15 - —
dms. t.c.l. frt allid lb .16 - —
tanks frt allid lb .13 —
p-Nitrotoluene tech., cast, dms., c.l., works lb .27½- —
dms t.c.l. works lb .27½- —
flake, dms., c.l., t.l., works lb .28 —
dms. t.c.l. works lb .27½- —
m-Nitro-p-toluidine dms lb .28 —
Nonylphenol dms. c.l. frt. allid lb. 1.25 —
dms., t.c.l. frt. allid lb. .22½- —
tanks, frt. allid lb. .23½- —
Nonylphenol prices on shipments to Western States are 3c higher lb .20 —
Nutmegs, East Indian, whole, bgs. West Indian, bgs lb. 1.18 - —
Nutmeg oil USP dist. East Indian, lb. 1.20 - —
West Indian cns. cns lb 9.00 12.00
Nux vomica, bls lb 9.00 12.00
Powd. bbls. bxs. lb 20 —
lb .20 .22

O

Ocher (see Iron oxide, nat.)
Ocotea cymbarum oil, dms. Brazilian, Bayonne, N.J. gal .45 - .47
1-Octanol, tech. dms. c.l., dlvd., Zone 1 lb .20 —
dms., t.c.l., dlvd. Zone 1 lb 43½- —
tanks, dlvd. Zone 1—lb. 45½- —
Octyl alcohol, perfumers grade, bots. lb 41 —
Octyl alcohol, tech, see 1-Octanol, tech)
tert-Octylamine dms. c.l. t.l., f.o.b. works lb 1.60 3.25
dms. t.c.l. same basis lb .54½- —
Octylphenol, bgs. c.l., works lb .22½- —
bgs. t.c.l., works lb .23 —
tanks works lb .21½- —
Octylphenol in dms. 1lc. higher

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms lb. .15¼- .15¾
tanks lb. .13¾- .14
Oleic acid, dbl.-dist. (white), dms. tanks lb. .18¼- .20¾
S. D., dms lb. .15¾- —
tanks lb. .17¼- .19¾
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs Tears, cs lb. 15 20
Olibanum oil, bots lb 22 30
Extra fine, bots lb 5.00 7.85
Olive oil, edible, dms., spot, duty paid t.t.l. 2.35 - 2.40
Olivine, crude, works ton 12.00 - —
20 mesh, works ton 15.00 - —
100 mesh works ton 20.00 - —
Opium, USP, cns. 25-lbs., f.o.b. works oz .19.20 - —
gran., cns., 50 lbs., same basis. oz .20 - —
powd., cns., 50 lbs., same basis. oz .21.65 - —
Orange oil, expressed, USP, Calif., Calif., sweet, cns., dms lb .70 - .90
Florida, cns., dms lb .60 - —
Messina cns. lb .0 .45
West Indian bitter, cns., dms. lb. 3.25 5.00
Orange peel, bitter, Haitian, bls lb 2.50 3.50
Sweet lb .18 .20
lb .28 .30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb 1.80 2.30
Orris root, Florentine, bls lb .55 - —
powd., bbls. bxs lb 65 - —
Verona, bls lb 35 - —
powd. bbls. bxs lb 45 - —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid)
Orthochloroparanitroaniline (see 2-Chloro-4-nitro aniline)
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid)
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 3-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine)
Osazin, USP bots. gram 3.60 4.00
Ouricury wax, crude, bgs lb. .52 - .54
Refd., pure, bgs lb. .58 - .60
Oxalic acid, bgs., c.l., works lb. .18 —
bgs., 10,000-lb. lots, works lb. .19 —
bgs., smaller lots, works lb. .20½- —
Oxalic acid in drums is priced ½c. per lb higher
b-Oxynaphthoic acid pigment manufacture, dms., frt allid lb. .912 - —
Oyestuff manufacture, dms., same basis lb 1.03 1.14
Oxyquinolin sulfate, cns. 100-lb lots, works lb 4.75 5.00
cns., smaller lots, works lb 4.93 5.17

P

Palm oil, clarif., dms lb. .14¾- .15¾
tanks
Palm oil acid, double dist. dms lb. .12 - .18½
tanks
single dist., dms lb. .13½- —
tanks
Palmarosa oil, cns lb. .13 - —
Papain, powd bots lb. 4.50 6.00
Papaverine hydrochloride, nat. or syn. USP cns., 25-oz to 100-oz lots oz 5.00 —
cns., smaller lots oz 5.05 5.20
Papaverine sulfate, nat. or syn., USP, cns oz 7.10 7.35
Paprika, Bulgarian, bgs lb. .30 - —
Hungarian, bgs. lb. .31 - —
Spanish, bgs lb. .30 - —
Yugoslavian, bgs. lb. .59 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen)
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine)
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol)
Paradibromebenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.30 - —
Chlorinated, kgs. lb. 1.41 - —
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- .0660
Paraffin, fully refd 122°-124°F., ASTM, tanks, refy lbs. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
Paraffin, fully refd., 132°-134°F., ASTM, tanks, refy lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraffin oil, pale, 100-110 vis., at 100°F. tanks east coast refy gal. .14 - —
Paraffin wax (see Paraffin)
Parafermaldehyde 91% flake, bgs., c.l., frt allid lb. .10 —
bgs. t.c.l. frt allid lb. .12 .13
91% powd. bgs. c.l. ex whse. lb. .1715 —
bgs. t.c.l. ex whse lb. .1865 —
USP X, fib dms. c.l lb. .19 —
fib dms. 1,000-lb lots lb. .20 —
fib dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd. E lb. .14 - —
55-gal. dms., t.c.l., dlvd. E lb. .15½- —
tanks, dlvd. E lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol)
Paraphenetidine (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion, ethyl dms. frt allid lb .84 —
Parathion prices 2c per lb higher in West
Paratoluenesulfonamide (see p-Toluenesulfonamide)
Passion flower herb, bls lb .35 .40
Patchouli oil, imp., cns. lb. 5.60 6.50
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd E of Rockies lb. 1.00 —
Peacock blue price 1c. higher W. of Rockies.
Peanut meal, old process, 45%, bgs., f.o.b., mills ton 58.50 - —
solvent, same basis ton 56.00 - —
Peanut oil, crude, tanks, f.o.b. mills lb. .13¾- —
Refd., dms. lb. .18¾- .19¼
tanks
Pectin, dom., NF, citrus, powd., 100 kilos, f.o.b. shipt. pt. kilo. 4.52 —
Pelargonic acid, dms., c.l., dlvd lb. .25 —
ton lots, same basis lb. .27½- —
tanks, same basis lb. .23½- —
Penicillin, potassium, cryst., bulk, 1,000,000 un.ts. .018 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .020 - —
Pennyroyal oil, USP, imported, cns. lb. 1.95 2.70
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., less than ton-lots, same basis. lb. .29 - —
bgs., c.l., t.l., 2,000 lb. minimum, same basis lb. .22½- —
Pentachlorophenol in dms lc. higher
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 —
bgs. t.c.l., dlvd lb .32 —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol) and Tripentaerythritol.
Pentane, indust., tanks, Tex refy. gal. .14 - —
Pentobarbital, dms. 100 lbs. or more lb 6.00 - —
Pepper, black, Malabar, bgs. Lampong, bgs. lb. .48 - —
Red, Funtuas, bgs. lb. .48 - —
Japanese, Hontoka, bgs. lb. .32 - —
Samtaka, bgs. lb. .37½- —
Sudanese, bgs. lb. .31½- —
White, Muntok, bgs lb. .36 - —
Peppermint leaves, dom., USP, bls., imp., USP, dms. lb. .74 - —
Peppermint oil, nat., dms. lb. No stocks.
Redist., USP, dms lb. 4.90 - 5.25
Perchloroethylene dms., c.l., or t.l., dlvd lb. 5.50 - —
dms., t.c.l., dlvd. lb. .13½- —
tanks, dlvd. lb. .15¼- —
tanktruck, 1,000 gal. min. dlvd lb. .11¾- —
Peri acid, dry bbls., frt allid lb. .12¼- —
Paste, bbls. frt allid lb. 1.60 —
Peru balsam, dms lb. 1.55 - —
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American, cns., dms lb. 2.30 - —
Petrolatum, cream, dms., c.l., refy. lb. .08125- —
dms., t.c.l., dlvd. lb. .10125-.11375
tanks, refy lb. .05675- —
Extra amber, dms., c.l., refy lb. .07125- —
dms., t.c.l., dlvd. lb. .09125-.10375
tanks, refy. lb. .04875- —
Petrolatum, lily white, dms., c.l., refy lb. .08625- —
dms., t.c.l., dlvd. lb. .10625- .12
tanks, refy lb. .06735- —
Petrolatum, USP, snow white, dms., c.l., refy lb. .09125- —
dms. t.c.l. dlvd lb. .11125- .125
tanks, refy. lb. .06875- —
Petrolatum, USP, soft yellow, dms., c.l., refy lb. .07125- —
dms., t.c.l., dlvd. lb. 095 .10375
tanks, refy lb .04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works. lb. .16½- .18¾
non-ret. dms. t.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., t.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., c.l., frt. allid, E lb .91 - —
dms. t.c.l. same basis lb .93 - —
p-Phenetidine, dms., c.l., frt. allid. lb. 1.05 - —
dms. same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lbs., frt. allid lb. 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital)
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. allid. E of Rockies lb. .17¾- —
non-ret. dms. t.c.l., same basis. lb. .18¾- —
tanks, same basis lb. .15¾- —
Phenol, 82-84% (cresol 16-18%) non-ret. dms., c.l., same basis. lb. .17½- —
non-ret. dms. t.c.l., same basis. lb. .18½- —
tanks, same basis lb. .15½- —
Phenol, 39°C., or above, tar dist., non-ret. dms., c.l., same basis. lb. .19 - —
39°C., or above, tar dist., non-ret. dms., t.c.l. lb. .20 - —
tanks, same basis lb. .17 - —
USP, syn. dms., c.l., t.l., frt. allid lb. .19½- —
dms., t.c.l., same basis lb. .21½- —
tanks, same basis lb. .17½- —
Phenolphtnalein, USP or yellow, 250-lb dm., 2,000 lbs., frt. allid lb. 1.30 - —
250-lb dm., same basis lb. 1.35 - —
Phenothiazine drench, fib dms., t.l., dlvd lb. .40 - —
fib. dms., ton lots, dlvd lb. .49 - —
NF, fib. dms., t.l., dlvd lb. .45 - —
fib. dms., ton lots, dlvd lb. .48 - —
Phenyl acetate, dms. 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50%, bots 100%, bots. lb. 2.15 2.35
Phenylacetic acid, pure, cryst., cns lb. 3.80 4.00
dl-Phenylalanine, dms., 1-kilo kilo. 65.00 - —
l-Phenyl-3-carbethoxy pyrazolone-5, fib dms. 200-lb lots, fib dms. smaller lots, dlvd E lb. 3.45 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .50 - —
dms., t.c.l., dlvd. E lb. .51½- —
tanks, dlvd. E lb. .47½- —
m-Phenylenediamine, dms., c.l., t.l., frt. allid lb. 1.08 - —
t.c.l., t.l.l., same basis lb. 1.10 - —
o-Phenylenediamine, comi, fib, dms, 100 to 1,000 lbs., works. lb. 1.70 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 —
Phenylethanolamine, dms., c.l., works lb. 75½- —
dms., t.c.l., same basis lb. .76¼- —
Phenylethyl acetate, bots lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 - 1.30
Standard, dms. lb. 1.10 - 1.20
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. allid lb. 1.50 - —
dms. smaller lots, frt. allid lb. 1.70 - 1.85
Phenylethylphenyl acetate, bots lb. 4.00 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine 97%, 450-lb. dms. lb. 1.45 - —
dms., 250-lb. lots, dlvd E lb. 1.80 - —
fib dms., smaller lots, dlvd E lb. 2.10 - —
o-Phenylphenol, dms., t.c.l., works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., t.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾- .28
nubs, bgs. lb. .33¼- .37
seeds, bgs. lb. .20 Nom.
sorts, bgs. lb. .20 .24
Phloroglucinol, coml., fib dms., works lb 6.40 - —
CP, bots., works lb. 17.75 - —
Tech., fib dms. works lb. 10.45 - —
Phloxin red toner (see Eosin red toner)
Phosgene, ret. cyls. works lb 15½- —
Phosphate, defluorinated (see under D)
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 46.50 - —
Phosphate rock, Florida, land pebble, run of mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines, short-ton. 4.989 5.298
68-70%, b.p.l., bulk, c.l., same basis short-ton. 5.849 5.858
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.429 6.438
Phosphate rock, Florida, land pebble, run of mine, washed, dried, unground, 74-75%, b.p.l., bulk, c.l., same basis, short-ton. 7.329 - 7.338
76-77%, b.p.l., c.l., bulk, same basis short-ton 8.219 8.228

Above Florida prices are based on fuel oil at 2.52 per bbl. and labor at $1.64

Phosphoric acid, food grade, 75%, cbys. c.l., works, f.o.b. frt. equald 100 lbs. 7.00 - —
cbys. t.c.l., same basis 100 lbs. 7.25 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80% chys., c.l. frt equald 100 lbs. 7.85 —
cbys., t.c.l., works 100 lbs. 8.10 9.35
tanks, t.w., works 100 lbs. 6.00 —
NF 85%, cbys., c.l., works. 100 lbs. 8.50 —
cbys., t.c.l., works 100 lbs. 8.75 9.00
tanks, t.w., works 100 lbs. 6.65 —
Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
White (yellow), solid, dms., c.l., dms. t.c.l., works, frt. equald lb. .20 .20½
tanks, works, frt equald, lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works, frt. equald lb. .12½- —
Phosphorus pentasulfide, powd., dms, c.l. works lb. .13½- —
Solid, dms., c.l. works lb. .14½- .15½
dms. t.c.l. works lb. .11½- —
Phosphorus pentoxide, dms., c.l., works lb. .12½- .13½
dms. t.c.l. works lb. .1375- .1475
Phosphorus sesquisulfide, dms., c.l., works lb. .1475- .1675
dms. t.c.l., works lb. .38 - —
Phosphorus trichloride, dms., c.l., works lb. .39 - .40
dms., t.c.l., works lb. .14 - —
tanks, works lb. .15 - —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .12½- —
bgs., t.c.l., same basis lb. .20 - —
tanks, same basis lb. .21 - —
Phthalimide, 97-98%, dms., frt. allid lb. .19½- —
Phthalocyanine blue, full strength, bbls., dlvd E of Rockies. lb. 2.90 - —
Resinated, bbls., same basis lb. 2.75 - —
Water dispersable, bbls., same basis lb 1.52 - —
Phthalocyanine blue prices 1c. higher W. of Rockies.
Phthalocyanine green toner, bbls., works lb. 3.35 - —
Resinated, bbls. lb. 3.00 - —
Water dispersable, bbls. lb. 1.71 - —
Phthalocyanine green prices 1c. higher W. of Rockies
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more lb. 5.00 - —
NF, fib. dms. lb. 5.20 - —
α-Picoline, dms. c.l., works, frt. equald lb. .46 - .48
tanks, same basis lb. .46½- .49
b-Picoline, 98% dms., t.l., works. lb. .43 - .46
dms., t.c.l., same basis lb. 1.05 - —
tanks, same basis lb. 1.15 - —
b,g-Picoline, 5°C. dms., c.l., works. lb. .95 - —
dms., t.c.l., works lb. .32½- —
g-Picoline, dms., t.o.b., works lb. .33 - —
tanks, t.l., same basis lb. 1.60 - —
Picric acid, NF, bbls. lb. 1.50 - —
Tech., bbls. lb. .85 - —
Pigment green B, kgs lb. .44 - —
Pilocarpine hydrochloride, USP, bots oz. 1.55 - —
Pilocarpine nitrate, USP, bots., vials. oz. 4.75 - 5.25
Pimento, Jamaican, bgs lb. 4.65 - 5.15
Mexican, bgs lb. .53½- —
Pimento berry oil, NF, dms. lb. .56 - —
Pimento leaf oil, crude, cns lb. 3.75 9.25
Pine oil, dest.-dist. dms., t.c.l. works lb. 2.50 - 2.60
dms. t.c.l. ex whse. New York. lb. .15 - —
Steam-dist. dms. ex whse., New York lb. .173 - —
dms. dlvd lb. .185 - —
Pineneedle oil, Siberian (see Abies Siberica oil).
Pink root, bls. lb. .188 - —
Piperazine anhyd., dms. c.l., frt. allid. E lb. 2.25 - —
dms., t.c.l., frt. allid. E lb. 1.80 - —
Piperazine citrate, 36% dms., 1,000 lbs. or more, frt. allid lb. 1.85 - —
Piperazine dihydrochloride, 51%, dms. 1,000 lbs or more, frt. allid lb. 1.33 - —
Piperazine hexahydrate, 44% dms., 1,000 lbs. or more, frt. allid lb. 1.29 - —
dms., 200-900 lbs., frt. allid lb. .90 - —
Piperazine phosphate, 42% dms., 1,000 lbs or more, frt. allid lb. .93 - —
Piperidine, dist., 98% min., 5 dms. or more, t.c.l., t.l., f.o.b. works lb. 1.11 - —
1-4 dms., same basis lb. 2.65 - —
dms., c.l., t.l., frt. equald lb. 2.55 - —
Piperonyl butoxide, dms., dlvd E lb. 4.50 5.05

PITCHES

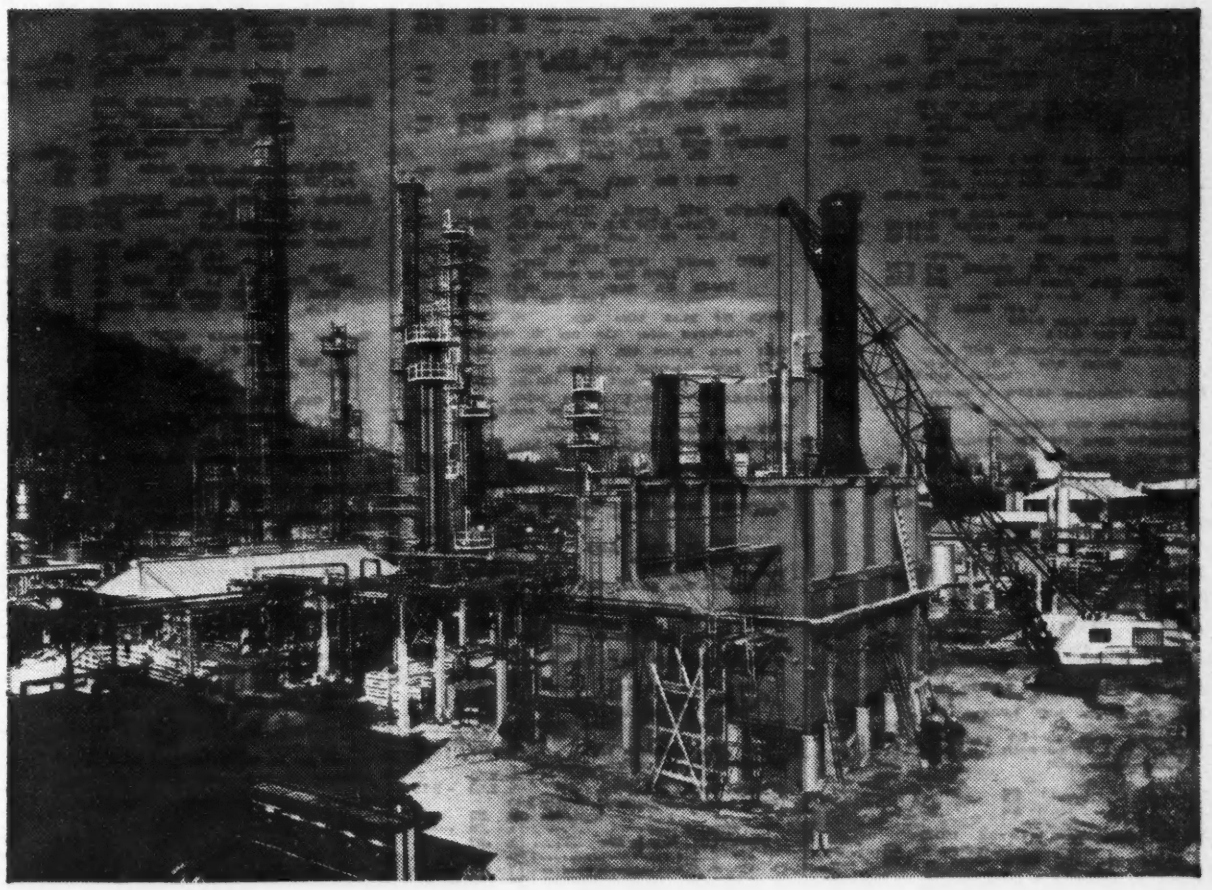
Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Platinum metal, works.....oz.31.00 -35.00
Pleurisy root, bls. .....lb. .45 .50
Podophyllum resin, NF, dms....lb.12.50 -15.50
Poke root, bls. .....lb. .19 - .22
Polymyxin, bots., bulk., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units, 1,000,000 units. .54 - —
bulk, bots., 1-23 billion units, 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works. lb. .44 - —
dms., smaller lots, works..... lb. .47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works lb. .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works ... lb. .47 - .49
Pontianak copal gum, chips, bgs. .lb. .23½- .26
Nubs, bgs. .....lb. .38 - .44
Poppy seed, Argentine, bgs. ....lb. No stocks.
Dutch, bgs. .....lb. .14 - —
Danish, bgs. .....lb. .14 - —
Polish, bgs. .....lb. .13 - —
Turkish, bgs. .....lb. .11 - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
dms., l.c.l., same basis 100 lbs. 5.25 - —
tanks, same basis 100 lbs. 3.70 - —
reg., flake, 88-92% dms. c.l., same basis 100 lbs. 9.55 - —
Potash, reg., flake, 88-92%, dms., l.c.l., same basis 100 lbs. 11.05 - —
solid, 88-92% dms., c.l., works 100 lbs. 9.10 - —
dms., l.c.l., works .... 100 lbs. 10.60 - —
Potassium acetate, NF, 200-lb. dm., f.o.b. works, E lb. .31 - —
Potassium bicarbonate, USP, gran. dms lb. .22 - —
powd., dms lb. .24 - —
Potassium bichromate, gran., bgs., c.l., l.l., works lb. .18 - —
bgs., l.c.l., works lb. .18½- .19¼
Potassium bichromate in dms. ½c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald lb. .37 - —
100-lb bgs., 5,000 lbs., 1 shipt., same basis lb. .38 - —
100-lb bgs. smaller lots, same basis lb. .40 - —
Potassium borohydride, powd., dms., works lb. 16.00 -22.00
Pelletized potassium borohydride $1.25 per lb. higher in 1,000-lb lots
Potassium bromate, 200-lb. dms., c.l., frt. alld lb. .49 - —
Potassium bromide, USP, gran., bbls., kgs lb. .39 - .40
Potassium carbonate, dom., NF, gran., bbls., dms lb. .22 - .24
Dom. tech. powd., bbls., dms lb. .21 - .22
Dom., calcinated, bgs., c.l., works, 100 lbs. 8.50 - —
bgs., l.c.l. same basis 100 lbs. 9.55 - —
Dom. hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 - —
bgs. l.c.l., works 100 lbs. 8.15 - —
Potassium chlorate, cryst, dms., c.l., works lb. .12¼- —
dms., l.c.l., works lb. .13½- .14½
Powd., dms., c.l., works..... lb. .12¼- —
dms. l.c.l., works lb. .14 - .15
works lb. .12¼- —
Potassium chlorate, NF, cryst., dms. 2,000 lbs or more, works lb. .16¾- —
NF, gran., 25-lb metal dms lb. .36 - —
NF powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Potassium chloride indust., 99.9% KCL, bulk, c.l., works ton. 29.00 - —
bgs., c.l., works ton. 34.00 - —
99.3% KCL, bulk, c.l., works ton. 28.00 - —
bgs., c.l., works.....lb. 33.00 - —
USP, cryst., dms.....lb. .17 - —
USP, gran., dms. .....lb. .21 - .23
USP, powd., dms. .....lb. .24 .26
Potassium chloride agricultural (see Potassium muriate)
Potassium chromate, tech., dms., works lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dms., f.o.b. works E lb. .43 - —
powd., 250-lb dms., same basis, lb. .46 - —
Potassium cyanide, dms., 20,000-lb. lots or more, works lb. .42½- —
dms., 2,000-19,999-lb. lots, works, lb. .43 - —
dms., smaller lots, works lb. .44 .44½
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works ....lb. .65 - —
Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms., smaller lots .....lb. .29 - —
Potassium fluoborate, fib. dms., c.l., works lb. .30 - —
fib dms., l.c.l., works lb. .31 - —
Potassium fluoride, dms., works lb. .36 - .37
Potassium gluconate, 100-lb. dm., f.o.b. works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms. lb. 2.10 2.30
Potassium hydroxide, tech. (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots lb. .33½- .36
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots fb. 1.38 - —
Potassium iodide, USP cryst., gran., dms., 500-lb., f.o.b. works, lb. 1.55 - —
Potassium manure salt, min. 20% K₂O, bulk, c.l., works, unit-ton. .17 - .1765
Potassium metabisulfite, gran., dms., lb. .16 - —
Powd., dms lb. .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .37½- .39½
bagged 60% minimum K_2O, same basis ton. 26.60- .27.80
Gran., bulk, c.l., works unit-ton. .38½- .40½
bagged, 60% minimum K_2O, same basis ton. 28.10 -30.10
Inside prices apply to material contracted for prior to July 1, 1960.
Outside prices apply to material contracted for after that date but also for delivery during the current month.
Potassium nitrate, NF, cryst., bbls., 20-ton lots..100 lbs. 17.00 - —
bbls., smaller lots....100 lbs. 18.00 -19.00
gran., bgs., 20-ton lots..100 lbs. 9.50 - —
bgs., smaller lots ....100 lbs. 11.00 -12.00
powd., bgs., 20-ton lots..100 lbs. 10.50 - —
bgs., smaller lots ...100 lbs. 12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm. f.o.b. works E lb. .32 - —
Potassium pentaborate, gran., dms., c.l., works ton. 219.50 - —
dms., ton lots, ex whse. 100 lbs. 17.48 - —
dms., smaller lots, ex whse. 100 lbs. 18.73 - —
Powdered potassium pentaborate $10 per ton higher.

Potassium perchlorate, dms., c.l., works lb. .18¼- —
dms., l.c.l., works ..... lb. .19 - .20
Potassium permanganate, coml., kgs. works lb. .25 - .33
USP, dms., works ..... lb. .29 - .35
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works ..... lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .1475- .1575
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be. 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs 7.25 7.65
tanks, works ..... 100 lbs. 6.15 - —
Potassium silicate, electrical grade, 40.5° Be. 1:2.1, dms., c.l., works 100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 6.70 - —
tanks, works 100 lbs 5.60 - —
Potassium silicate, glass grade, bgs., c.l., works 100 lbs. 17.30 -18.00
bgs., l.c.l., works 100 lbs. 17.80 —
Soln., 29° Be. 1:2.5, dms., c.l., works 100 lbs. 4.95 - —
dms., l.c.l., 5-dm. lots or more, works 100 lbs 5.70 - —
tanks, works 100 lbs 4.60 - —
Potassium silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb higher.
Potassium stannate, dms., frt. alld. lb. .784 - .857

Potassium sulfate, min 50% K_2O, agricultural, bulk, c.l., works unit-ton. .70½- .72½
Inside price applies to tonnage contracted for prior to July 1, 1960.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.
Potassium sulfate NF VII, cryst., dms. lb 31 .33
NF VII, gran., 400-lb. dm lb. .18 - —
NF VII powd., 400-lb dm lb. .17 - —
Potassium sulfocyanate NF cryst., (see Potassium thiocyanate)
Potassium thiocyanate, NF cryst., dms., works lb. .96 .98
Tech., dms., works lb. .77 .79
Potassium titanate, ctns., c.l., works lb 16¼ - —
ctns., 5-ton lots, works lb. 16½- —
ctns., 1-ton lots or less, works lb. 16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk works, base price ton. 13.45 - —
bulk, works, July forward ton. 14.00 - —
Potassium-sodium tartrate, NF gran or powd., 250-lb dms., c.l., works E lb. 42½- —
250-lb dms., 5,000-lb lots, same basis lb. 43 - —
250-lb dms., same basis lb. 43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 .40

Potassium-zirconium flouride, fib dms. c.l. works lb .50 —
fib dms., l.c.l. works lb .52½ .55
Pregnenolone, bots. gram No prices.
Pregnenolone acetate, bots. gram No prices.
Procaine hydrochloride USP antibiotic grade dms., 2,000-lb lots frt alld lb 2.25 —
Procaine hydrochloride, USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb 2.40 —
dms. 500 lbs ..... lb 2.45 —
dms. 100 lbs ..... lb 2.50 —
Progesterone USP bots ... gram No prices.
Pregnenolone acetate bots gram No prices.
Propenyl guaethol dms lb. 24.30 27.00
b-Propriolactone tech., dms., c.l., f.o.b. works lb. 47½ —
dms., l.c.l., l.l., same basis lb. 48½ —
tanks, same basis lb. .45 —
Propionic acid syn. pure, dms., c.l., dlvd lb. 23¼ —
dms., l.c.l., dlvd. ..... lb. .24¾ —
tanks, dlvd. ..... lb. .20¾ —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾ —
dms., l.c.l., dlvd ..... lb. .16¾ —
tanks, dlvd ..... lb. .12¾ —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 .15
dms., l.c.l., dlvd ..... lb. .15½ .16½
tanks, dlvd ..... lb. .11½ .12½
n-Propyl gallate, dms., 100 to 2,000-lb lots works lb 3.90 4.40
n-Propyl-p-hyroxybenzoate, USP, dms lb. 2.30 2.40



Ashland Oil completes world's first petroleum naphthalene unit!

Start-up operations are now under way on the world's first unit to produce naphthalene from petroleum in commercial quantities. A development of Ashland Oil research, this patented, hydrodealkylation unit, valued at several million dollars, was constructed in the record time of seven months at Ashland Oil's principal refinery near Ashland, Kentucky.

It is anticipated that the output of this revolutionary new unit, which has an announced capacity of 75 million pounds of naphthalene of the highest purity available, will virtually eliminate the shortage of naphthalene that exists today in the domestic market. In addition, this new unit will contribute measurably to alleviating the world-wide shortage of high purity naphthalene.

You can look to Ashland Oil as a reliable source of supply for high purity naphthalene and benzene as well as such chemicals as toluene, xylene and heavy aromatic concentrates. Under active appraisal and consideration are the manufacture of other petrochemical "building blocks" used in the fiber, plastics, rubber and coating industries.

We welcome your inquiries on all products and potential uses, and will be most pleased to work with you in making the necessary studies and economic evaluations for your particular requirements. Call or address your inquiries to National Account Department, Ashland, Kentucky.

Ashland OIL PRODUCTS

ASHLAND OIL & REFINING COMPANY

ASHLAND, KENTUCKY

Propyl thiouracil bots., 50 kilo lots or more kilo 55.00 — ; bots. smaller lots kilo 55.10 55.30
n-Propylamine dms. c.l., dlvd lb 1.24 — ; dms. l.c.l. same basis lb 1.255 —
n-Propylene dichloride consumers, dms c.l. dlvd E lb .0845- — ; dms. l.c.l. same basis lb .0995- — ; tanks same basis lb .07 —
Propylene dichloride prices in West 1c. higher same basis
Propylene glycol indust., dms., c.l., dlvd E lb .15 — ; dms. l.c.l. same basis lb .16¾- — ; tanks same basis lb .12½ —
USP dms. c.l. dlvd E lb .17 — ; dms l.c.l same basis lb .18¾ — ; tanks, same basis lb .14½- —
Propylene glycol methyl ether, dms. c.l. dlvd lb .20 — ; dms. l.c.l. same basis lb .21 — ; tanks, same basis lb .18½- —
Propylene oxide dms c.l. dlvd & lb .17 — ; dms. l.c.l. dlvd & lb .18½ — ; tanks dlvd E lb .14½ —
Psyllium seed, black, bgs lb .38 .40 ; Blonde bgs lb .18 .20 ; Husks ngs lb .42 .45
Pumice dom grd. coarse to fine, 0 ½ 1 1½ 2 3, bgs., ton lots lb .03½ .04¼ ; bgs., smaller lots lb .03½ —
Imp. Italian silk-screen coarse, bgs ton lots lb .06½ — ; fine, bgs ton lots lb .04 — ; sun dried coarse bgs ton 60.00 — ; fine bgs ton 60.00 70.00
Pumpkin seed ngs lb .25 .26
Pyrethrins syn (see Allethrin)
Pyrethrum flowers fine grd 0.9% pyrethrins ngs ton, works lb .50 — ; Powd. 1.3% pyrethrins ngs., ton works lb .71 — —
Pyrethrum liquid 20:1 basis (2 grams pyrethrins per 100cc odorless base) dms works gal 9.60 9.80
Pyrethrum liquid 100:1 basis (10 grams pyrethrine per 100cc odorless base) dms., works gal 45.90 46.90
Pyrethrum oleoresin, dewaxed 20% dms., works lb 11.00 11.35 ; purif 20% dms works lb 11.00 11.35
Pyridine denat dms c.l. works and frt equald gal 2.77 — ; dms. l.c.l. same basis gal 2.80 —
Reid. 2" non-rec. dms., c.l., same basis lb .75½- — ; dms., l.c.l., same basis lb .76 - .76½ ; tanks, same basis lb .71 — —
Pyridoxine hydrochloride, USP 500-gram bots. dms. f.o.b works kilo 95.00 100.00
Pyrites Canadian 48-50% S, mines, long-ton 4.50 5.00
Pyrocatechol (see Catechol)
Pyrogallic acid NF (see Pyrogallol)
Pyrogallic acid tech. obls., 100 lbs., f.o.b. works lb 3.50 —
Pyrogallol NF 100-lb dms lb 3.50 —
Pyroxylin USP bots lb 9.50 —

Q

Quassia chips lb .10 —
Quicksilver (see Mercury metal)
Quince seed, bgs lb. 1.75 - 2.00
Quinidine sulfate USP 1,000-oz dm oz .24½ — ; Quinine, NF, 1,000-oz. dm oz. .3750- — ; Quinine bisulfate USP 1,000-oz dm oz .28 — ; Quinine hydrochloride 1,000 oz dm oz .3650- — ; Quinine sulfate USP 1,000 oz dm oz .3150- —
Quinoline dms c.l. frt equald lb 50¾ — ; dms., l.c.l., same basis lb 51¼ — ; tanks same basis lb 50 —

R

R salt paste dms. frt alld. 100% basis lb .98 — ; Powd frt alld 100% basis lb 1.08 —
Rapeseed oil, dms lb. .18 - .18½ ; tanks lb. .16¼- —
Rare earth oxalate, NF 45-50% bgs works lb 1.15 —
Rauwolfia serpentina root powd., bbls dms lb 1.00 1.20
Red carmine No 40 (see Carmine)
Red oil (see Oleic acid)

RED PIGMENTS

Red pigment quotations are listed individually For example prices on Red, lithol toner, may be found in the L's under Lithol red toner

Red precipitate (see Mercuric oxide red)
Red toner, Lake C alizanine, bbls., works lb 1.20 — ; Reserpine cryst bots gram 1.25 —
Resorcinol tech grade bgs., c.l., works, frt equald lb .77½- — ; bgs., l.c.l., same basis lb. .78½- — ; Resorcinol in dms. 1c per lb more
USP powd. dms works lb 2.95 —
Resorcinol monoacetate NF dms lb 2.50 —
Rhatany root bgs lb .14 .16
Rhodamine red toner, molybdated, PMA kgs. works lb 6.00 — ; Fungstated PTMA works kgs lb 6.60 —
Rhodinol 5-lb cans lb 42.00 51.00 ; Synthetic lb 14.00 16.00
Rhubarb root, india whole bgs lb .25 — ; powd bgs lb .35 —
Riboflavin USP fib dms, kilo or more dlvd kilo 36.00 — ; Riboflavin 5 phosphate-sodium fib dms kilo or more dlvd kilo 104.50 —
Rice bran oil clarified dms. c.l. lb .14 .14½ ; tanks dlvd & lb .12 Nom
Ricinoleic acid (see Castor oil acids split)
Rochelle salt (see Potassium sodium tartrate)
Roofing pitch (see Coal tar pitch roofing)
Rose oil, nat. Bulgarian bots lb 1,152.00- — ; Turkish bots lb 560.00 750.00
Rosemary oil Spanish NF ens., dms lb .97 1.40 ; Spanish tech ens dms lb .50 1.20
Rosin gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, fib dms works unit lb. .10½- — ; Resin 25-45% fib dms. works unit lb. .10½- —
Rottenstone bgs. 5-ton lots, ex whse lb 03¾ — ; bgs. ton lots same basis lb 04¼ —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 — ; Group 3 gal. .13875- — ; Houston, Texas gal. .155 —
Rue oil, bots lb. 2.75 3.00
Rutin NF fib dms. 10 kilo lots, kilo. 11.00 - — ; fib. dms., 5 kilo lots kilo. 11.50 - — ; fib. dms., 1 kilo kilo. 13.00 - —
Ryania 100% powd., bgs., c.l., works lb .22 - — ; bgs., l.c.l. same basis lb .24 - —

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S acid, bbls., works lb. 3.25 - —
Sabadilla seed activated, ground with lime bbls lb. .42 .44
Saccharin calcium, fib dms. 1,000-lb lots, works lb 2.50 - — ; USP gran. soluble dms., 1,000-lb lots lb 1.40 - — ; dms., smaller lots lb 1.50 - —
USP powd. soluble insoluble, dms. 1,000-lb lots lb 1.45 - — ; dms smaller lots lb 1.55 - —
Saccharin USP, powd, insoluble, dms., 1,000-lb lots lb 1.43 - — ; dms. smaller lots lb 1.53 - —
Safflower oil, dms., New York lb. .795- .1820 ; tanks, Atl. Coast lb. .795- .1620
Saffron Mancha Superior, tins lb. 19.50 - —
Safrol dms lb 65 - —
Sage Dalmatian, bgs lb 40 - —
Greek, ens lb 15 - —
Italian ens lb 18 - —
Sage oil, clary, bots lb. 12.00 -15.00 ; Dalmatian ens lb 2.85 3.25 ; Spanish ens lb 1.25 1.75
Sal soda (see Soda sal)
Salicylaldehyde dms c.l., t.l., f.o.b. plant frt equald lb 1.23 - — ; dms l.c.l. same basis lb 1.25 - — ; Salicylamide 100-lb dms lb 1.05 - —
Salicylic acid tech. fib dms., c.l., t.l., dlvd lb. 40½- — ; fib dms l.c.l. dlvd lb. 44¾- —
Salicylic acid USP, cryst 200-lb. fib dms., 1,000 lbs or more lb. .51¾- — ; 200-lb fib dms less than 1,000 lbs lb. .54¾ —
Salicylic acid, cryst., 100-lb. fib. dms., 1,000 lbs. or more lb. .53¾- — ; 100-lb fib dms less than 1,000 lbs lb .56¾ —
USP powd. 100-lb fib dms., 1,000 lbs or more lb. .58¾- — ; 100-lb fib dms less than 1,000 lbs lb. .61¾ —
Salol, NF gran. bbls. kgs lb 1.20 — ; Powdered salol 25c per lb higher.
Salt rock paper bgs. c.l. 100 lbs 1.09 - —
Salt table vacuum common, fine, paper bgs c.l. 100 lbs 1.34 - —
Saltcake, dom bulk, works, 100% Na_2SO_4 basis ton 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood E Indian chips bgs., lb .55 .66 ; powd. fib dms lb .75 .76
Sandalwood oil, ens lb 21.00 —
Sarcosine tech. tanks, f.o.b. works, frt equald lb 1.03 — ; lb No stocks.
Sassafras oil, artif., dms lb .45 — ; Nat. dom dms lb 1.40 - — ; Savory oil ens lb 4.75 - —
Schaeffer's salt paste, dms., frt alld 100% basis lb .85 - ; Powd. bgs. frt alld 100% basis lb .95 -
Scopolamine hydrobromide, USP bots oz 13.00 —
Sebacic acid CP bgs. c.l. works lb .69½- — ; bgs. l.c.l. works lb .71½ — ; Purified, bgs c.l. works lb .65½ — ; bgs l.c.l. works lb .67½ —
Seidlitz mixture fib dms. 5,000-lb lots lb .30½ — ; fib dms. smaller lots lb .31 .32
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls lb. 3.00 - 3.25
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22 ; siftings lb. .16 - — ; Tinnevelly, No. 1, bls lb. .22 - — ; No 2, bls lb. .18 - — ; No. 3, bls lb. .14 - — ; pods, b's lb. .28 - — ; powd., bbls., bxs lb. .17 - —
Serpentaria root, b's lb. 6.50 - —
Sesame oil, USP, dms., l.c.l lb. .37 - .38
Sesame seed Colombian ngs lb. 15½- — ; Lebanese hulled, ngs lb. .19 - — ; Nicaragua, hulled, bgs lb. .21 - — ; nat., bgs. lb. .15 - — ; Salvadorian Nat. bgs lb 16 - —
Shellac bleached, mixed dry bgs, 1,500-lb. lots lb. .47 - — ; dms., c.l., works lb .22 .23½ ; bbls., 1,500-lb lots lb. .46 - — ; kgs., 1,500-lb lots lb. .47 - —
Bonedry shellacs prices for less than 1,500-lb lots 1c per lb higher for all packages.
Shellac bleached refd bgs. 1,500-lb lots lb .56 — ; bbls. 1,500-lb lots lb .57 - — ; kgs. 1,500-lb lots lb .58 —
Shellac orange lemon No 1, bgs., 10-bg lots lb .37 .39 ; lemon No 2 bgs. 10 bg lots, lb .34 .37 ; superfine bgs. 10-bg lots lb .32 .34
Shellac in 1 to 10-bg lots 1c per lb more
Shingle stain oil tar distillate dms. c.l., works gal .37 — ; dms., l.c.l., works gal .48 — ; tanks, works gal .25 —
Sienna pigment burnt, paper bgs., c.l., works lb. .08½ .18½ ; paper bgs l.c.l., works lb. .06¾- .17¾ ; Raw, paper bgs., c.l., works lb .06¾ .16¾ ; paper bgs l.c.l. works lb .07 .17
Silica, amorph dry grd 325 mesh, bgs., c.l., works ton 25.00 — ; bgs. l.c.l. works ex whse ton 45.00 55.00
Silica hard quartz 99½%, 325 mesh, bgs c.l. works ton 20.00 — ; bgs l.c.l works ton 25.00 - — ; 99½% 140 mesh bgs., c.l. works ton 15.00 — ; bgs. l.c.l. works ton 20.00 - —
Silicon tetrachloride tech. dms., c.l., works lb. .20 - — ; tanks, works lb. .15 —
Silver bullion ingots, cs Troy oz. .91⅜- — ; Silver cyanide bots. 1,000-oz lots, oz. .94¾ — ; bots. 500-oz lots oz .95¼ — ; bots. 100-oz lots oz .96¼ —
Silver nitrate CP cryst., bots., 1,000 to 4,000 oz. f.o.b. works oz. 67¼ — ; bots 250-500 oz. same basis oz. 67¾ —
USP granular silver nitrate 4c per oz higher
Silver proteinate, mild, USP, 16-oz. bots oz 1.46 - —
Snakeroot oil, Canada, ens lb. 40.00 -43.00
Soapbark, crushed, bls lb. .30 .35 ; Powd., bls lb. .35 - .40 ; Whole, bls lb. .20 - .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - — ; paper bgs., l.c.l., stock pts., 100 lbs. 3.00 - 4.77 ; bulk, c.l. works 100 lbs. 1.60 - —
Soda ash, light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - — ; paper bgs. l.c.l., stock pts. 100 lbs. 3.95 4.72 ; bulk, c.l., works 100 lbs. 1.55 - —
Soda caustic, flake, 76%, dms., c.l., works, frt equald 100 lbs. 5.20 - — ; liq. 50% sellers tanks works, dry basis 100 lbs. 2.90 - — ; 50% rayon type sellers tanks, works, dry basis 100 lbs. 2.90 3.00
Soda, caustic, liq. 73%, sellers' tanks works dry basis, 100 lbs. 3.00 — ; liq. 73% rayon type, sellers' tanks, works, dry basis lb. 3.00 3.10 ; solid 76% dms. c.l. works, 100 lbs 4.80 —
Soda sal conc. bgs. c.l. works 100 lbs. 2.50 - — ; bgs. smaller lots, works 100 lbs 2.80 - —
Sodium acetate anhyd. bgs., c.l., dlvd E lb. .14½- — ; bgs., l.c.l., same basis lb. .16½- — ; NF 60% gran. dms. c.l. works, lb. .15½- — ; dms. l.c.l. works lb. .17½- —
Sodium alginate, NF, white powd., dom 300 lbs or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate bgs. c.l. dlvd, E lb. .27½- — ; bgs. l.c.l. dlvd E lb. .29 —
Sodium arsenate 60% arsenic pentoxide, 200 lb. dm. less than ton lots, f.o.b. works lb. .24 - — ; ton lots or more, same basis, lb. .23½- —
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb dms., ton lots or more, f.o.b., works lb. .18½- — ; 1,600-1,900 dms., same basis lb. .19 - — ; 100-500 dms., same basis lb. .20 - —
Sodium ascorbate, dms., 100-kilos., dms., f.o.b. works kilo. 6.80 - — ; less than 100-kilos kilo 7.05 - —
Sodium benzoate tech., dms., c.l., t.l., frt. alld lb. .35 - — ; dms. l.c.l. same basis lb. .39 - — ; USP dms. c.l. t.l. frt alld lb. .38 - — ; dms. ton lots same basis lb. .43 - — ; dms. 1,000-lb lots, same basis, lb. .45 - —
Sodium bicarbonate USP, gran., bgs., c.l. works 100 lbs 2.95 - — ; bgs. l.c.l. works 100 lbs 3.85 - — ; USP powd. bgs c.l., works, 100 lbs 2.55 - — ; bgs., l.c.l. works 100 lbs 3.45 - —
Sodium bichromate, gran., ogs., c.l., t.l., works lb. .13 — ; bgs. l.c.l. works lb. .13½- .14¾ ; Sodium bichromate in dms ¾c. per lb higher
Sodium bifluoride, fib. dms., c.l., works, frt. equald lb. .19½- — ; fib. dms., l.c.l., same basis lb. .2025- —
Sodium bisulfate bulk c.l. works, 100 lbs 2.00 — ; dms c.l., frt equald 100 lbs 3.00 3.60 ; dms. l.c.l. frt equald 100 lbs 3.50 4.10
Sodium bisulfite anhyd., bgs. c.l., works 100 lbs 5.00 — ; bgs l.c.l. works 100 lbs 5.45 - — ; Soln., 35° bbls. c.l., works 100 lbs 1.70 - — ; bbls l.c.l works 100 lbs 2.20 - —
Sodium borate (see Borax)
Sodium borohydride powd., dms., c.l. works lb. 19.90 — ; dms. l.c.l. works lb 33.00 40.00
Sodium borohydride stabilized water soln 12% NaBH, 100% basis dms. works lb. 15.00 - — ; Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.
Sodium bromide USP gran dms., works lb. .40 - —
Sodium carbonate cryst. monohydrated (see Soda sal)
Sodium carbonate, monohydrated, bgs., c.l. works 100 lbs 3.10 - — ; bgs. l.c.l. works 100 lbs 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate cryst., 350-lb dms., c.l. works lb. .09 — ; dms. l.c.l. works lb .09½- .10¼
Sodium chlorate in 100-lb dms. only, ¼c per lb higher
Sodium chloride, tech (see Salt).
Sodium chloride, USP gran. bgs, lb. .05 - —
Sodium chlorite tech. dms., c.l., works lb. .58 - — ; dms. 20-dm lots or more works lb. .66 — ; dms. smaller lots, works lb. .70 - .73
Sodium chloroacetate tech. dms., c.l., works lb. .27 — ; dms. l.c.l. works lb. .28 —
Sodium chromate, anhyd. fib dms., c.l., t.l., works lb. .14¾ — ; fib dms l.c.l. works lb. .15¼- .16½
Sodium chromate tetrahydrate, bgs. c.l. t.l. works lb. .1015- — ; bgs. l.c.l. lb. .1065- .1190
Sodium citrate anhyd. 200-lb dm., f.o.b works E lb. .62 — ; NF VIII gran bgs. c.l., same basis lb. .26 - — ; USP XIV gran. bgs. c.l., same basis lb. .29 —
Sodium citrate USP powd prices ½c higher.
Sodium cyanate dms. 1,000-lb lots, works lb. .85 — ; dms. smaller lots works lb. .90 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., works 20,000-lb lots lb. .176 — ; dms. same basis, 5,000 to 19,999-lb lots lb. .188 — ; dms. same basis, 1,000 to 4,900-lb lots lb. .198 —
Sodium cyclamate 100-lb dm. f.o.b. works lb. 1.95 —
Sodium diacetate, anhyd. 39-41% acetic acid, dms., c.l., works lb. .18 — ; 250-lb dms. c.l., works lb. 18¾- — ; Tech 33-35% acetic acid, dms., t.c.l., works lb. .15 — ; 250-lb dms t.c.l. works lb. 15¾- —
Sodium dimethyl dithiocarbamate, 40% soln, dms. c.l., t.l., frt. alld., 100% basis lb 42 — ; dms. l.c.l. t.l., same basis lb. .47 .52 ; tanks, same basis lb .38 —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- — ; bgs smaller lots lb. .14¼- —
Sodium fluoride white, 97%, fib. dms. c.l. works, frt. equald lb. .1390- — ; fib dms., t.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs., c.l., works, 100 lbs. 7.05 - — ; bgs., t.c.l., ex whse 100 lbs. 8.65 - —
Sodium gentisate, 100-lb. fib. dms. lb. 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .84 - — ; Tech., bgs., c.l., t.l., same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 - 2.50 ; 25% soln. in oil, dms., 50 lbs. or less, f.o.b. shipping point, lb. 2.20 - — ; dms., 50-99 lbs., same oasis lb. 1.77 - — ; dms., 100-999 lbs., same basis lb. 1.20 - — ; dms., 1,000 lbs or more, same basis lb .95 —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite dms. c.l., frt. alld lb. .23½ — ; dms. l.c.l. frt. alld. lb. .25¾- —
Sodium hydroxide, NF, pellets, 100-lb dms., 1 to 100-dm. lots, lb .23½- .28
Sodium hydroxide, tech (see Soda, caustic).
Sodium hypophosphite, NF, dms. 1,000-lb. lots lb. .99 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb dms., f.o.b. works lb. 2.13 —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- — ; dms., t.t.l., dlvd. lb. .21½- — ; tanks, dlvd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs 4.25 6.50 ; t.c.l., bgs., works 100 lbs. 4.40 7.00
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate octahydrate, gran. bgs. c.l. works ton 210.00 — ; bgs., ton lots, ex whse 100 lbs. 8.30 - — ; bgs. smaller lots ex whse 100 lbs. 9.61 -11.61
Tetrahydrate bgs. c.l. works ton 210.00 — ; bgs., ton lots, ex whse 100 lbs. 14.83 - — ; bgs., smaller lots, ex whse 100 lbs. 16.08 -18.08
Sodium metallic, bricks, c.l. works lb. .21 — ; Fused, 18,000-lb lots or more, works lb. .19½- — ; tanks, works lb. .17 - —
Sodium metalinate, bbls., frt. alld. lb .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b shipping pt 100 lbs. 11.10 - — ; bgs., l.c.l., same basis 100 lbs. 11.85 - — ; dms., c.l., same basis 100 lbs. 11.70 - — ; dms., l.c.l. same basis 100 lbs. 12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs. 5.70 - — ; bgs., 6,000-19,900 lb lots, works, 100 lbs. 6.05 - — ; dms., c.l., works 100 lbs. 6.20 - — ; dms., l.c.l., works 100 lbs. 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs. 4.45 - — ; bgs., l.c.l., works 100 lbs. 4.80 6.75 ; dms., l.c.l., works 100 lbs. 4.95 — ; dms., l.c.l., works 100 lbs. 5.30 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 .99 ; Cryst., dms. works frt alld lb .74 .76
Sodium monoglutamate (see Monosodium glutamate)
Sodium monohydrate (see Sodium carbonate monohydrated)
Sodium naphthionate bbls. lb. .72 - —
Sodium nitrate dom. crude, bgs. c.l. works ton 48.00 - — ; bulk, c.l., works ton 44.00 - — ; Imp., crude, 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton 48.00 - — ; bulk, c.l., same basis ton 44.00 - —
Sodium nitrite, USP, bbls., c.l. works, frt equald 100 lbs. 9.00 - — ; bbls., l.c.l., same basis 100 lbs. 11.00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - — ; dms., t.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works 100 lbs. 5.65 — ; bbls., t.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 88%, bgs., works 100 lbs. 12.35 - — ; 99% bgs., works 100 lbs. 15.40 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate)
Sodium para-aminosalicylate (see Sodium p-aminosalicylate)
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - — ; dms., t.c.l., same basis lb. .27½- .34 ; Pellets, dms., c.l., same basis lb. .26 - — ; dms., c.l. same basis lb. .27½- .34 ; Powd., dms., c.l. same basis lb. .25 — ; dms. t.c.l. same basis lb. .26½- .33
Sodium pentabarbital USP, dms., 100 lbs. or more lb. 6.60 —
Sodium perborate NF, tech., bgs., c.l., works lb. .18½- — ; bgs. t.c.l. works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd E of Miss lb. .21½- — ; dms., t.c.l. same basis lb. .22 - .22½
Sodium phenobarbital USP, 100-lb. dms lb. 3.75 - —
Sodium phenosulfonate, USP IX, gran. dms lb. .52 - .53 ; NF powd dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs c.l. frt equald 100 lbs. 8.10 - — ; bgs., l.c.l., same basis 100 lbs. 8.50 - 9.55
Sodium phosphate, dibasic, cryst., bgs., c.l., t.l., frt equald 100 lbs. 4.75 - — ; bgs., l.c.l., frt. equald 100 lbs. 5.15 - 5.90
Dibasic duohydrate, bgs. c.l. frt equald 100 lbs. 7.75 - — ; bgs., l.c.l., same basis 100 lbs. 8.25 - —
Monobasic anhyd bgs c.l. frt equald 100 lbs. 9.15 - — ; bgs., l.c.l., same basis 100 lbs. 9.55 -10.15
Tribasic anhyd. bgs c.l. frt equald 100 lbs. 9.15 - — ; bgs. l.c.l. frt equald 100 lbs. 9.60 -10.20
Sodium phosphate in dms 60c to 80c. higher than bgs
Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 .20½
Sodium picramate, tech., paste, dms. f.o.b works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms dlvd E of Rockies, lb. .37 - — ; Prices W of Rockies 3c per lb more.
Sodium prussiate yellow (see Sodium ferrocyanide)
Sodium pyrophosphate, acid, bgs., c.l. works frt equald 100 lbs. 11.25 - — ; bgs., l.c.l., same basis 100 lbs. 12.00 -12.50
Sodium pyrophosphate, tetric, dms., c.l. t.l. works lb .36 — ; dms. t.c.l. works lb. .37 .39
Tetrabasic, anhyd., bgs., c.l., works frt equald 100 lbs. 7.55 - — ; bgs., l.c.l., same basis 100 lbs. 8.30 - —
Sodium salicylate USP dms., 1,000-lbs or more lb. 78½- — ; dms. less than 1,000 lbs dms lb. 81½- —
Sodium sesquicarbonate bgs. c.l., works 100 lbs. 3.35 - —

Sodium sesquicarbonate, bgs., l.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
dlvd. zone 2 100 lbs 4.35 - 4.60
dlvd. zone 3 100 lbs 4.75 - 4.90
dlvd zone 4 100 lbs 5.35 - 5.60
Sales zones are (1) Atl. states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss. south of 31°; Tex E. of 100°; S of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark E. of 93° Ga.; Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala. La. and Miss. No of 31°; (3) Ark W of 96° Kan., Neb W. of 98° N. D., Okla., S. D., Tex., W of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo and El Paso, Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs 5.70 - —
dms. c.l. t.l., works 100 lbs 6.20 - —
Sodium sesquisilicate hydrated, bgs., c.l. works 100 lbs 5.00 - —
bgs., 6,000-19,900 lb lots, works 100 lbs 5.35 - —
dms. c.l., works 100 lbs 5.50 - —
dms. 6,000-19,900 lb lots works. 100 lbs 5.85 - —
Sodium silicate, liq., 40° Be. 1:3.2, turbid dms. c.l. works 100 lbs 1.65 —
dms. t.c.l. works 100 lbs 1.90 2.40
tanks works 100 lbs 1.20 —
47° Be 1:2.9 turbid, dms., c.l., works 100 lbs 2.25 —
dms. t.c.l. works 100 lbs 2.60 3.45
tanks, works 100 lbs 1.90 —
52° Be 1:2.4 turbid, dms., c.l., works 100 lbs 2.85 —
dms., t.c.l., works 100 lbs 3.00 3.50
tanks, works 100 lbs 2.30 —
Solid, 1:3.2 bgs. works ton 67.50 —
Sodium silicofluoride, bgs., c.l., works lb. .065 —
bgs. t.c.l. works lb 725- —
Sodium silicofluoride in dms. 0.4c per lb. higher
Sodium stannate dms. works, frt., alld, E lb. .642 - .702
Sodium sulfa drugs (see Sulfa name)
Sodium sulfanilate bbls. works lb .22 —
Sodium sulfate NF VIa, dried, powd., dms lb. .22½- —
Tech. anhyd. bgs c.l. dlvd E. 56.00 - —
Sodium sulfate, tech., detergent, rayon grade, bgs., c.l., works ton.38.00 - —
bulk, c.l., works ton.34.00 - —
USP cryst fib dms lb 17½- .18
Sodium sulfhydrate flake 70-72%, dms. c.l. works, frt. equald lb. 07¼- —
dms. t.c.l. same basis lb. 08¼- —
Liq. 40-44% tanks works, 100% basis ton.130.00 —
Sodium sulfide flake, dms., c.l., works, E., frt equald lb. 06 - —
dms. t.c.l., same basis lb. 07 - —
Fused bbls., c.l. works, E., frt. equald lb. .05½- —
bbls. t.c.l., same basis lb 06½- —
Sodium sulfite anhyd., powd., bgs., c.l. works 100 lbs. 7.55 - —
bgs. t.c.l. same basis 100 lbs 7.95 —
Sodium sulfide, anhyd., tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs. t.l. same basis 100 lbs 4.00 —
Sodium sulfocyanide CP (see Sodium thiocyanate)
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40%, dms., c.l., works frt. equald lb. .04½- —
dms. t.c.l. same basis lb. .05½- —
Sodium thiocyanate, purified, cryst., 250-lb. dms lb. .90 - —
Tech. anhyd. dms., 1 ton lots or more, works lb. .367 - —
dms. less than ton lots, works lb. .387 - —
Sodium thiosulfate NF cryst. bbls. lb. .13½- —
Tech. anhyd. 100-lb bgs. c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb bgs t.c.l. t.l.l., frt. equald 100 lbs. 8.15 - —
Sodium thiosulfate tech., anhyd., photo grade, 64-lb bgs., c.l., t.l., frt. equald lb. .0775- —
64-lb bgs. t.c.l. t.l.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
Sodium thiosulfate tech., pentahydrate, photo grade, 100-lb. bgs. t.c.l., t.l.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns. c.l., works. lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton lots or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb dms., c.l., frt alld E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb cns., c.l. frt. alld E lb .42 —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c. per pound higher
Sodium tripolyphosphate, bgs., c.l. works, frt. equald 100 lbs. 7.90 - —
bgs., t.c.l., same basis 100 lbs. 8.65 - —
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs 8.95 —
bgs., t.c.l., works 100 lbs 9.70 -13.13
dms., c.l., works 100 lbs 9.45 —
dms., t.c.l., works 100 lbs.10.20 -10.60
Sodium tungstate, tech., kgs. dlvd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate dms., t.l., dlvd lb. .22½- —
dms., t.t.l., same basis lb. .23 - —
Sodium-zirconyl sulfate, fib dms. 1,000-lb lots or more works lb. .28 - —
fib. dms., smaller lots, same basis lb .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Solvent naphtha, petroleum, straight aromatic, 310°-360°F b.r., 14°-16°C m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York. gal. .30 - —
Houston, Texas gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 311°-365°F b.r., 31°C m.a.p., tankcars, New Jersey and New York gal. .235 —
286°-340°F. b.r., 22°C m.a.p., tankcars, New Jersey and New York gal .275 —
Solvent naphtha, 319°-380°F b.r., 27°C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322-395°F b.r., 25°C m.a.p., tankcars, New Jersey and New York gal .28 - —

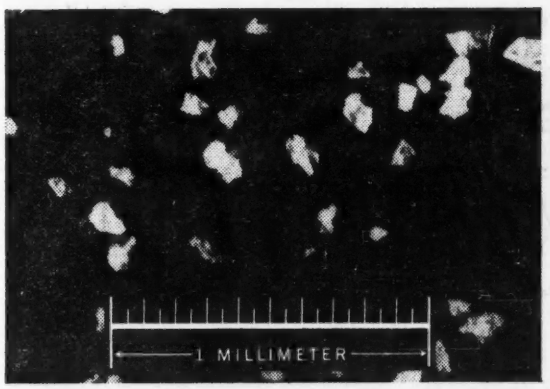
Sorbitan monostearate, fib dms., 20,000-lb. lots, works lb. .33½- —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., t.c.l. works lb. .19 - —
tanks, works lb. .16¼- —
cryst., resin grade, pellets, dms., c.l. works lb. .23 —
dms. 1 to 5-ton lots works. lb .25 .26
powd., dms., c.l., works lb. .38½- —
dms., 10,000 to 20,000 lb. lots, works lb. .40½- —
Sorbitol, soln., comyl., aqueous, dms., c.l. works lb. .26 - —
dms., t.c.l., works lb. .27 - —
tanks, works lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works. lb. .23 —
bgs., t.c.l., works lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ton.65.00 - —
Soybean oil, crude, tanks, Decatur. lb. .12⅞- —
Foots, soapstock acid 95%, tanks, New York lb. .06 - —
Refd., alkali, dms. lb. .17 - .17¼
tanks lb. .15 - —
Clarified, dms. lb. .16½- .16¾
tanks lb. .14½- —
Refd., salad, dms. lb. .17 - .17¼
tanks lb. .15 - —

Soybean oil acids, dbl. dist., dms., lb. .16¾- .19¼
tanks lb. .14¼- —
S. D., dms lb. .15½- .18
tanks lb. .13 - —
Sparteine sulfate, ens., 100 oz. or more oz. .80 - —
Spearmint leaves, dom., bls lb. .75 - —
Spearmint oil, NF, dms lb. 6.50 - —
Sperm oil, bleached winter, 45°, dms lb. .1675- .1775
tanks lb. .1475- —
Nat., winter 45°, dms lb. .1575- .1675
tanks lb. .1375- —
Spermaceti wax, blocks, cs. lb. .32 .33
Cakes, cs. lb. .33 .34
Spruce oil, ens., dms. lb 2.10 3.55
Squill, white, bls. lb. .16 - .18
Powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible, bls. lb. .17 - —
Stannic chloride, anhyd., dms., works lb. .812 - .834
Stannic oxide, dms., dlvd. lb. 1.10 - 1.11
Stannous chloride anhyd., dms., works lb. 1.007 - 1.262
works lb. .87 - .88
Stannous sulfate, dms., works lb. 1.062 - 1.102
Star root (see Helonias root)
Stargrass root (see Aletris root.)
Stavesacre seed, bgs lb. .60 .61
Stearic acid, dbl., pressed, bgs. lb. .16½- .19
Single-pressed, bgs. lb. .16 - .18½
Triple-pressed, bgs. lb. .18¼- .20¾

Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston gal. .1475- —
tanks, group 3 gal 12875 —
Stramonium leaves, bgs. lb. .16½- .18
Streptomycin sulfate bulk, gram .03 .032
Strontium bromide, NF, cryst., gran., 150-lb. dm., frt. equald lb. 1.00 —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb .33 —
dms. 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 —
Strontium chromate fib dms., dlvd. lb. .48 —
Strontium iodide, jars, 25-lb lots lb 3.57 —
Strontium nitrate, bgs., c.l. works. 100 lbs.11.00 —
bgs., t.c.l., works 100 lbs.12.00 —
Strontium salicylate, NF, dms lb. 1.83 —
Strontium sulfate, air floated, 90%, 325 mesh bgs., works. ton.56.70 66.15
Strophanthin G (see Quabain, USP).
Strophanthin K bots. oz.25.00 25.50
Strophanthus seed, Kombi, biologically tested, bgs. lb. 2.50 - 3.00
Styrax gum, USP cs lb. 4.50 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., dlvd. lb. .17 - —
dms. t.c.l., same basis lb .19 —
tanks, frt. equald. lb. .13 - —

Get Sodium Bicarbonate in the grain size you need **every time...**

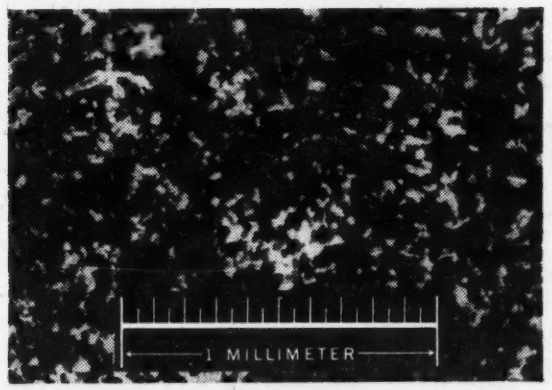
FROM CHURCH & DWIGHT



Sodium Bicarbonate U.S.P. Powdered No. 1—For general purpose use in chemical processing, dyestuffs, adhesives, starches, textiles and industrial applications.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

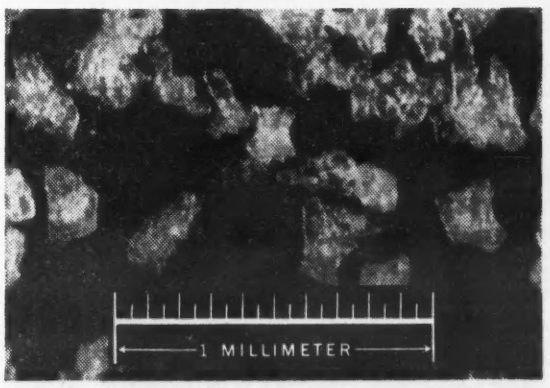
42 Mesh	Trace	200 Mesh	35.0%
100 Mesh	.5%	325 Mesh	70.0%
170 Mesh	20.0%	400 Mesh	80.0%



Sodium Bicarbonate U.S.P. Fine Powdered No. 3DF for use specifically in dry powder fire extinguisher mixes, also in rubber and plastics blowing, lubricant for sheet vinyl.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

170 Mesh	Trace	325 Mesh	25.0%
200 Mesh	2.0%	400 Mesh	45.0%



Sodium Bicarbonate U.S.P. Granular No. 5 for use in effervescent salts, other pharmaceuticals and special types of cleansers.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

42 Mesh	Trace	100 Mesh	92.5%
65 Mesh	27.0%	170 Mesh	99.0%
80 Mesh	66.5%		

Sodium Bicarbonate U.S.P. Treated Free-Flowing for use in fire extinguishers and sponge rubber.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

42 Mesh	Trace	200 Mesh	35.0%
100 Mesh	.5%	325 Mesh	70.0%
170 Mesh	20.0%	400 Mesh	80.0%

Are you getting Sodium Bicarbonate of the specific grain size for optimum results in your process or for maximum shelf life and performance of your products? You can eliminate doubts by specifying Church & Dwight. This simple step will assure you of obtaining the widest selection of grain sizes available because Church & Dwight is the country's largest supplier of Sodium Bicarbonate U.S.P. You'll also receive for the asking unmatched technical service based on more than 100 years of experience with Sodium Bicarbonate. Unusual grain size requirements are given special attention. Try us and see. For technical data on all grades of Sodium Bicarbonate, send for brochure, "Church & Dwight Sodium Bicarbonate—How It Serves Industry Today."

CHURCH & DWIGHT CO., INC., 70 PINE STREET, NEW YORK 5, N. Y.

Styrene Monomer—Tetrahydrofurfuryl Alcohol

Styrene monomer, tech., 99.2%, dms., c.l., dlvd	lb.	.15 -	—
dms., l.c.l., same basis	lb.	.17 -	—
tanks, frt. equald.	lb.	.11 -	—
Above prices are escalated for each calendar quarter on the basis of cost of benzene in the range of 31c. to 34c. a gallon and petroleum refining labor.			
Styrolyl acetate, bots	lb	1.03	1.10
Succinic acid purif., cryst., dms., t.l., frt alld	lb.	.62	—
dms., t.t.l., same basis	lb.	.63	.75
Succinic anhydride dms. c.l., t.l., dlvd	lb.	.51 -	—
dms., l.c.l., same basis	lb.	.52 -	—
Sucrose, refd. white, bgs. refy	E. lb.	.0955-	—
Sucrose acetate, isobutyrate, 90%, dms. t.l., dlvd	lb.	.33½-	—
dms., t.t.l., same basis	lb	35	—
tanks, same basis	lb.	31	—
100%, t.l., dms., dlvd.	lb.	.35½-	—
t.t.l., dms., same basis	lb.	.37	—
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs. l.c.l., works	lb.	1.00 -	—
Sugar (see Sucrose).			
Sugar cane wax dom., refd. slabs, 80-lb ctns., works	lb.	.60 -	.65
80-lb ctns. spot	lb.	.65 -	.75
Sulfabenzamide, dms.	kilo	8.80	9.90
Sulfabenzamide-sodium, dms.	kilo	9.00	-10.10
Sulfacetamide, USP, fib dms	kilo.	6.61	6.83
Sulfacetamide-sodium, USP, fib. dms	kilo.	8.15	9.25
Sulfadiazine, USP, microcrystals, dms	kilo.	23.35	-24.45
USP, powd., dms.	kilo.	22.60	-23.70
Sulfadiazine-sodium, USP, dms	kilo.	24.80	-25.90
Sulfaguanidine, NF X, dms	kilo	5.50	6.60
Sulfamerazine-sodium, USP, powd., dms	kilo.	24.80	25.90
Sulfamethazine, USP XV, microcrystals, dms	kilo.	19.65	-20.75
USP XV, powd., dms.	kilo.	18.75	-19.85
Sulfamic acid, cryst. dms., c.l., t.l., works	100 lbs.	16.00	—
dms., t.c.l., t.t.l., works	100 lbs.	17.50	18.50
Gran., dms., c.l., t.l., works	100 lbs.	14.75	—
dms., t.c.l., t.t.l., works	100 lbs.	16.25	-17.25
Sulfanilamide, NF, reg. 1,000 lb., frt. equald	lb.	1.50 -	—
NF, fib dm., frt equald	lb.	1.55 -	—
Sulfanilamide quinoxaline, veterinary, dms	kilo.	16.28 -	—
Sulfanilic acid, tech. dms. c.l., frt. alld	lb.	.21 -	—
dms., l.c.l., frt. alld	lb.	.23 -	—
Sulfapyridine, USP XV, powd., bots., tins	kilo.	15.45	-16.55
Sulfapyridine-sodium, monohydrate, dms	kilo.	16.53	-17.65
Sulfathiazole, NF X, microcrystals, dms	kilo.	6.25	6.90
NF X, powd., dms.	kilo.	5.50	6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more	lb.	2.35 -	—
Sulfur, comi., flour, bgs., mines.	100 lbs.	2.35 -	—
bbls., mines	100 lbs.	3.30 -	—
lump, bgs., mines	100 lbs.	2.25 -	—
bbls., mines	100 lbs.	2.80 -	—
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines	long-ton.	23.80 -	—
export, f.o.b. vessels, Gulf ports.	long-ton.	25.00 -	—
US and Canada, f.o.b. vessels Gulf ports	long-ton.	25.00 -	—
Domestic dark sulfur prices are $1 per long-ton lower.			
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos	long-ton.	24.00 -	—
Mexican dark sulfur price is $1 per long-ton lower.			
Sulfur, refd., flowers, NF, bgs., mines	100 lbs.	5.65 -	—
bbls., mines	100 lbs.	7.00 -	—
flour, light, bgs., mines	100 lbs.	5.25 -	—
bbls., mines	100 lbs.	6.25 -	—
lump, bgs., mines	100 lbs.	4.95 -	—
rolls, bgs., mines	100 lbs.	5.50 -	—
bbls., mines	100 lbs.	6.25 -	—
salt block, bgs., mines	100 lbs.	4.65 -	—
virgin block, bbls., mines	100 lbs.	4.70 -	—
Sulfur, rubbermakers, comi., reg., bgs., mines	100 lbs.	2.45 -	—
bbls., mines	100 lbs.	3.70 -	—
98-100%, passing through 325 mesh, bgs., mines	100 lbs.	2.55 -	—
bbls., mines	100 lbs.	3.80 -	—
Sulfur, rubbermakers, refd., bgs., mines	100 lbs.	4.90 -	—
bbls., mines	100 lbs.	6.05 -	—
treated, 2.5% mineral oil, bgs., mines	100 lbs.	2.75 -	—
bbls., mines	100 lbs.	4.00 -	—
Sulfur dichloride, ret. dms., c.l., works, frt. equald	lb.	.05¼-	—
ret. dms., l.c.l., same basis	lb.	.06¼-	—
tanks, same basis	lb.	.04½-	—
Sulfur dioxide, liq., comi., cyls., works, frt. equald	lb.	.10 -	.12
multi-unit cars, works	lb.	.0535-	—
tanks, works	lb.	.045 -	—
Sulfur dioxide, refrigeration, cyls., dlvd	lb.	.22 -	—
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald	lb.	.05¼-	—
dms., l.c.l., same basis	lb.	.06¼-	—
tanks, same basis	lb.	.04½-	—
Sulfuric acid, 60° Be, cbys., c.l., works	100 lbs.	2.00 -	—
cbys., l.c.l., works	100 lbs.	2.30 -	—
tanks, works	ton.	18.60 -	—
Sulfuric acid, 66° Be, cbys., c.l., works	100 lbs.	2.25 -	—
cbys., l.c.l., works	100 lbs.	2.55 -	3.35
tanks, works	ton.	22.35 -	—
98%, tanks, works	ton.	23.50 -	—
99%, tanks, works	ton.	23.70 -	—
Sulfuric acid, 100%, tanks, works.	ton.	23.95 -	—
CP, NF, consumers' cbys., c.l., frt. equald	lb.	.12¾-	—
Sulfuric acid, CP, NF, consumers', cbys., l.c.l., same basis.	lb.	.14¼-	.14¾
5-pt. bots., extra, cs., c.l., works, frt. alld	lb.	.16¼-	—
5-pt. bots., extra, cs., l.c.l., same basis	lb.	.17¾-	.18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works	ton.	25.00 -	—
40%, tanks, works	ton.	29.00 -	—
65%, tanks works	ton.	39.50 -	—
Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore	unit-ton.	.90	.93
bulk, c.l., Carteret, N. J.	unit-ton.	.90	.93
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla.	unit-ton.	1.00 -	—
bulk, f.o.b. vessel at Fla	unit-ton.	1.05 -	—
Sweet birch oil, USP, northern.	cns	lb. 4.00	9.50
USP, southern, cns	lb.	2.00	3.05

T

2,4,5-T, dms., c.l., works, frt. equald.	lb.	1.18 -	—
dms., l.c.l., same basis	lb.	1.25 -	—
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald	lb.	1.24 -	—
dms., l.c.l., works	lb.	1.29 -	—
Talc, dom., fibrous, grd., bgs., c.l., works, New York	ton.	28.00	—
bgs., l.c.l., works	ton.	31.00	-36.00
fibrous, 99.5%, 325 mesh, bgs., c.l., works, New York	ton.	31.00 -	—
bgs., l.c.l., works	ton.	34.00 -	—
Talc, dom., fibrous, 99.95%, 400 mesh, micronized, bgs., c.l works	ton.	38.00 -	—
625 mesh, micronized, bgs., c.l., works	ton.	80.00	—
Talc, dom., ord., Calif., grd., bgs., c.l., works	ton.	34.00	-39.50
Vermont, off-color, grd., bgs., c.l., works	ton.	19.40	—
bgs., l.c.l., works	ton.	37.00 -	—
Imp., Canadian, grd., bgs., c.l., mines	ton.	20.00	-35.00
tanks, works	lb.	.02⅞-	.03¼
Tall oil, crude, tanks, works	lb.	.03 -	.03¼
Dist., depending on grade, dms., c.l., works	lb.	.07 -	.09¼
tanks, works	lb.	.05¼-	.08
Tall oil, refd., depending upon grade, dms., c.l., works	lb.	.07¾-	.08¼
tanks, works	lb.	.06½-	.07½
Tall oil acids, dms., c.l., works	lb.	.07 -	.10
dms., l.c.l., works	lb.	.07½-	.10½
tanks, works	lb.	.05 -	.07¼
Tallow, edible, tanks, dlvd	lb.	.11½ Nom.	
Inedible, fancy, bleachable, tanks.	lb.	.07¼-	.07⅜
fancy, guaranteed, bulk, f.o.b. steamer	lb.	.07⅛-	—
dms., f.a.s.	lb.	.08⅛-	—
tanks, dlvd.	lb.	.07⅝-	—
No. 1, dlvd	lb.	.06¼-	.06¾
Prime, tanks, dlvd	lb.	.06⅞-	.07⅛
Special tanks, dlvd	lb.	.06¾-	.06⅞
Sulfonated, 25%, bbls., l.c.l.	lb.	.08½-	.08¾
50%, bbls., l.c.l.	lb.	.10½-	.11
Tallow acids, dist., dms	lb.	.13 -	.15½
tanks	lb.	.10½-	—
Hydrogenated, dms.	lb.	.15¼-	.17¾
Tallow oil, acidless, dms., c.l.	lb.	.12½-	—
dms., l.c.l.	lb.	.14½-	—
tanks	lb.	.11 -	—
Tangerine oil, Florida, dms	lb.	4.75 -	—
Tankage, animal, feeding, 9-11% ammonia, New York bulk.	unit-ton.	4.75	5.00
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots	lb.	2.05	—
bbls., smaller lots	lb.	2.06	2.07
NF, powd., bbls., 1,000-lb. lots	lb.	1.95	—
bbls., smaller lots	lb.	1.96	1.99
Tech., dms	lb.	1.05	—
Tansy oil, dms	lb.	6.60	8.00
Tar acid oil, 15-18%, dms., c.l., dms., l.c.l., same basis	gal.	.55½-	—
tanks, same basis	gal.	.43½-	—
Tar acid oil, 25-28%, dms., c.l., same frt equald	gal.	.53½-	—
basis	gal.	.60 -	—
dms., l.c.l., same basis	gal.	.62 -	—
tanks, same basis	gal.	.50 -	—
50-53%, dms., c.l., same basis	gal.	.75 -	—
dms., l.c.l., same basis	gal.	.77 -	—
tanks, same basis	gal.	.65 -	—
Tar, coal (see Coaltar).			
Tartar emetic (see Antimony potassium tartrate).			
Tartaric acid, NF, 100-lb. bgs., c.l., frt. equald	lb.	.41 -	—
bgs., 10,000 lbs. 1 shipt., same basis	lb.	.43 -	—
bgs., smaller lots, same basis	lb.	.47 -	—
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms	lb.	.70 -	—
Terpineol, extra, dms	lb.	.50 -	.60
Prime, dms.	lb.	.40	.50
Terpinyl acetate, extra, cns., dms.	lb.	.54	.75
Prime, dms	lb.	.53	.56
Terpinyl propionate, dms	lb.	1.65	1.70
Testosterone, USP bots.	gram.	No prices.	
Testosterone propionate, USP bots.	gram.	No prices.	
Tetrachloroethane, dms., works	lb.	.14½-	—
Tetrasodium pyrophosphate (see Sodium pyrophosphate).			
Tetrachloroethylene, tech. (see Perchloroethylene)			
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works	lb.	.20½-	—
dms., l.c.l., works	lb.	.22 -	.23¼
Tetraethyl orthosilicate, dms., c.l., dlvd. E	lb.	.60 -	—
dms., l.c.l., dlvd. E	lb.	.61½-	—
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald	lb.	.75	—
Tetraethylenepentamine, dms., c.l., dlvd. E	lb.	.53½-	—
dms., l.c.l., dlvd. E	lb.	.55 -	—
tanks, dlvd. E	lb.	.51 -	—
Tetraethylthiuram disulfide, tech., dms., frt. alld	lb.	1.04 -	—
Tetrahydrofuran, dms., c.l., t.l., works	lb.	.36½-	—
dms., t.c.l., or t.t.l., works	lb.	.37 -	—
tanks, works	lb.	.35 -	—
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn.	lb.	.31½-	—
dms., t.c.l., Memphis, Tenn	lb.	.32½-	—
dms., c.l. t.l., Newark, N.J	lb.	.33½	—
Tetrahydrofurfuryl alcohol, dms., t.c.l., Newark, N. J.	lb.	.34½-	—
tanks, dlvd. E of Denver	lb.	.31	—
tanks, dlvd. W. of Denver	lb.	.32 -	—

FOR GREATER
PIGMENTATION EFFICIENCY

TITANOX*-A-CG

AND

TITANOX-RA-40

They're the newest additions to the most complete and best known line of white titanium dioxide pigments available today.

FOR PAPER . . . TITANOX-A-CG, the coating-grade anatase titanium dioxide pigment made especially for surface applications.

FOR PLASTICS . . . TITANOX-RA-40, the rutile titanium dioxide pigment that yields more neutral whites and greater clarity of tints. Ideal for many plastic compositions, especially floor coverings.

Because of its exceptional ease of dispersion at high solids, TITANOX-A-CG produces smooth suspensions that are remarkably free from coarse agglomerates . . . that have low viscosity plus stability during aging. This pigment is well suited to high solids coatings applied at high speed by the trailing blade coater. It is also suitable for all other coating processes, including application at the size press or calender. TITANOX-A-CG embodies the full whitening, brightening and opacifying power of anatase TiO_2. In addition, it promotes the ready attainment of high gloss and uninterrupted smoothness of surface in fine finished papers.

TITANOX-RA-40 is characterized by ease of dispersion in plastic compositions plus the ability to whiten, brighten and opacify at the low pigment volumes usually associated with these products. This pigment is outstanding for the production of clean, bright whites and sharp tints. In low-loaded plastic compositions, it may well provide an economical replacement for other rutile titanium dioxide pigments. Where anatase TiO_2 is being used to produce the clean whiteness and desired tints often unattainable with rutile TiO_2's, TITANOX-RA-40 produces better color properties at economically lower loadings.

For complete information on the suitability of these new TITANOX pigments to your products, we cordially invite you to contact our Technical Service Department. Titanium Pigment Corporation, 111 Broadway, New York 6, N. Y.; offices and warehouses in principal cities. In Canada: Canadian Titanium Pigments, Ltd., Montreal.

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*TITANOX is a registered trade mark of National Lead Company for titanium pigments offered by Titanium Pigment Corporation.

® TITANOX
the brightest name in pigments

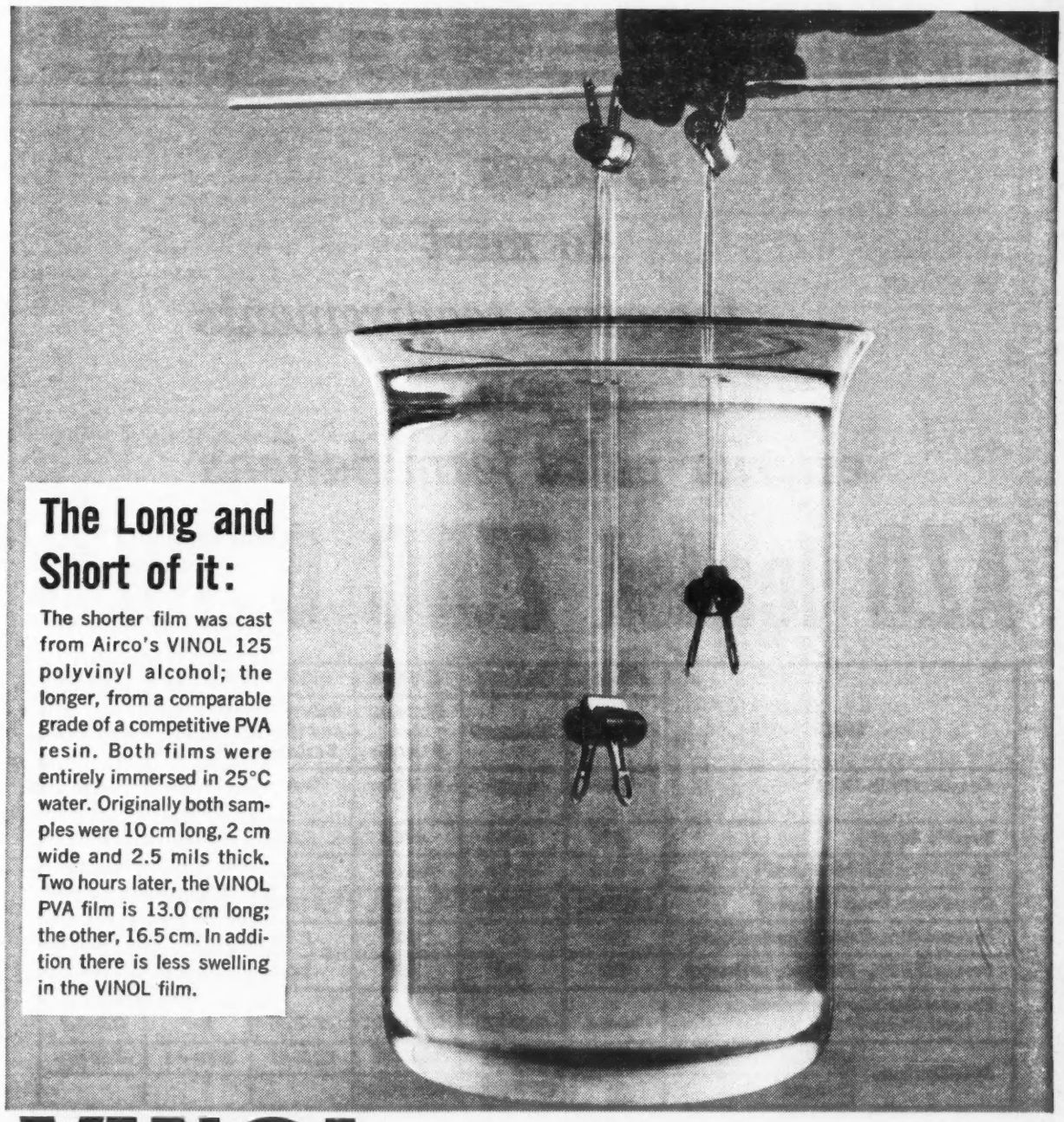
TITANIUM PIGMENT CORPORATION
Subsidiary of NATIONAL LEAD COMPANY

Tetrahydrophthalic anhydride dms., c.l., t.l., frt. alld. E	lb.	.39	- —
t.c.l., t.t.l., same basis	lb.	.41	- —
Tetrapotassium phosphate (see potassium phosphate).			
Thallium metal, dlvd	lb.	7.50	-10.00
Thallium sulfate, 99%, bots., dlvd.	lb.	5.00	-10.00
Theobromine, NF, fib dms., 100-lbs., f.o.b., works	lb.	4.10	- 4.15
Theobromine and sodium acetate, USP, fib dms., 500-lbs. works	lb.	6.45	- —
Theobromine, sodio-salicylate, NF, fib dms., 500-lbs., works.	lb.	3.80	- —
Theophylline, USP, anhyd., 100-lb. dms., frt alld	lb	3.65	- —
Thiamine hydrochloride, USP, fib dms., frt alld	kilo.	36.00	- —
USP, ampule grade, fib., dms., frt alld	kilo.	38.00	- —
Thiamine mononitrate, USP, fib dms. frt alld	kilo.	36.00	- —
Thiocarbanilide, dms., ton lots	lb.	74	- —
dms., less ton lots	lb.	76	- —
Thiodiphenylamine (see Phenothiazine)			
Thioflavin green toner, brilliant, molybdated. PMA, kgs., works	lb	5.20	- —
Tungstated PTMA, kgs. works	lb	6.20	- —
Thioglycolic acid, refd., 55 gal dms., ton lots, 100% basis	lb.	1.15	- —
Thiosalicylic acid, 80% dms. 1,000-lb., lots, works	lb	4.00	- —
Thiourea, tech. bgs. t.l. frt alld.	lb.	.30	- —
bgs., ton lots, same basis	lb.	32	- —
bgs., less than ton lots, same basis	lb.	33	- —
Thorium nitrate, purif., fib dms., 100-lb lots or more works	lb	3.50	- —
di-Threonine, dms., 100 kilos, works	kilo.	121.00	- —
Thyme leaves, French, triple sifted extra, bgs	lb.	.27	- —
Spanish, extra, bgs	lb.	.12	- —
triple sifted, bgs	lb.	25	- —
Spanish, bgs.	lb	09	- —
Thyme oil, NF, red, cns., dms	lb.	2.00	- —
NF, white, cns	lb.	2.20	- —
Tech., white cns	lb.	.40	1.85
Thymol, fib dms. 25-lbs., f.o.b works	lb.	2.45	—
Thymol iodide, NF, dms. 100-lbs. f.o.b. works	lb.	7.30	- —
Timbo root (see Cube root)			
Tin chloride (see Stannous chloride, anhyd.)			
Tin crystals (see Stannous chloride, hydrous)			
Tin metal (Straits)	lb.	1.02	- —
Tin oxide (see Stannic oxide)			
Tin sulfate (see Stannous sulfate)			
Tin tetrachloride, anhyd. (see Stannic chloride anhyd.)			
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd	lb.	.25½	- —
bgs., t.c.l., dlvd.	lb.	.26½	- —
reg., bgs., c.l., dlvd.	lb.	.25½	- —
bgs., t.c.l., dlvd	lb	26½	- —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla	ton.	180.00	—
Titanium dioxide, metallurgical, nat., bgs., 5-ton lots, Niagara Falls, N. Y	ton.	205.00	- —
bgs., ton lots, same basis	ton.	215.00	- —
Milled metallurgical titanium dioxide $7.50 per ton higher			
Titanium dioxide, rutile, nonchalking, bgs., c.l., dlvd E	lb.	.27½	- —
bgs., t.c.l., dlvd E	lb.	.28½	- —
Titanium dioxide-calcium pigment, 30% TiO_2, reg., bgs., c.l., dlvd	lb.	.09⅜	- —
bgs., t.c.l., works	lb.	.09⅞	- —
50% TiO_2, high-tinting, dms. c.l.,	lb.	.14⅜	- —
dms. t.c.l.	lb.	.14⅞	- —
Titanium hydride, powd., dms., works	lb.	8.10	9.00
Titanium tetrachloride, tech., dms., c.l., works	lb.	.26	- —
cans, t.c.l., works	lb.	.27½	- .29
tanks, works	lb	20	- —
Tobias acid, dms., c.l., t.l	lb.	.81	- —
dms. t.c.l.	lb.	.84	- —
d-a-Tocopherols, NF, mixer, conc pure basis, bots	kilo.	67.00	- —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots	kilo.	122.00	- —
d-a-Tocopheryl acid succinate, cryst., bots	kilo.	109.00	- —
dl-a-Tocopherol, bots.	kilo.	99.00	—
dl-a-Tocopheryl acetate, bots	kilo.	90.00	—
25% dry. powd., bots	kilo.	22.50	-24.00
33⅓% dry. powd. bots.	kilo.	30.00	-31.50
o-Tolidine base, dry, kgs., 100% basis	lb	1.55	—
Paste, kgs. 100% basis	lb	1.50	—

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride paste, kgs., 100% basis	lb.	1.50	—
Tolu balsam, cns	lb.	4.00	- —
Toluene, coaltar, indust., or nitration tanks, dlvd E. of Rockies	gal.	.25½	- —
Toluene, petroleum, indust., tanks, f.o.b., frt. equald	gal.	.25	- —
p-Toluenesulfonamide, powd., dms. t.l., works	lb.	.60	- —
dms. t.t.l. same basis	lb.	.63	- —
Toluenesulfonic acid, 55-gal. dms., t.l. frt alld	lb	.16	- —
1,000-lb or more, same basis	lb.	.18	- —
less than 1,000-lb., same basis	lb.	.23	- —
tanks, same basis	lb.	.14	- —
Toluenesulfonic acid in 10-gal. dms. ⅔c per lb more.			
p-Toluenesulfonic acid mononydrate, dms., c.l., or t.l	lb.	.90	- —
dms. 125 lbs to t.l.	lb.	1.00	- —
m-Toluidine, dms. c.l. works, frt. alld	lb.	.83	- —
dms., t.c.l., same basis	lb.	.84	- —
tanks, same basis	lb.	.82	- —
o-Toluidine, dms. c.l. works, frt. alld	lb	.30	- —
dms., t.c.l. same basis	lb	.31	- —
tanks, same basis	lb.	.28	- —
p-Toluidine, tech. flake, dms., frt. alld	lb.	.50	- —
Cast, dms. frt. alld	lb.	.45	- —
p-Toluidine-m-sulfonic acid, dms., works	lb.	.92	1.04
Toluidine red toner, deep shades, kgs., works	lb.	1.70	- —
Light shades, kgs, works	lb.	1.70	- —
2,4-Tolylenediamine, cryst., fib. dms., t.c.l., frt alld	lb.	1.10	- —
Tonka beans, Angostura, cks.	lb.	1.50	- —
Brazilian, Surinam, cs	lb.	1.30	- —
Totaquine, 100-oz lots, cns.	oz.	.42	- —
Toxaphene, dms. c.l. t.l., works.	lb.	.22	- —
dms. t.c.l. t.t.l., works	lb	.26	- —
Tragacanth gum, No. 1, ribbons, cs	lb	4.10	4.20
No 2, cs.	lb.	3.75	3.80
No. 3, cs.	lb.	3.40	3.65
USP powd, bbls	lb	1.05	1.15
Triacetin, dms., c.l., dlvd. E. of Rockies	lb	.39	—
dms. t.c.l. same basis	lb	.40	- —
tanks, same basis	lb.	.37	- —
Triallylamine, dms., c.l., dlvd	lb.	.995	- —
dms., t.c.l., dlvd.	lb.	.995	- —
tanks, dlvd.	lb.	.96	- —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver.	lb.	.42½	- —
non-ret. dms., t.c.l., frt. alld. E. of Denver	lb.	.43½	- —
tanks, frt. alld E of Denver	lb.	.40	- —
Tributyl phosphate, dms., c.l., works.	lb.	.52½	- —
dms, t.c.l., same basis	lb.	.53½	- —
tanks, same basis	lb.	.50	—
Tributylamine dms., c.l., works	lb.	.67½	- —
dms., t.c.l., same basis	lb.	.69	- —
tanks, same basis	lb.	.65	- —
Tributyrin, dms., c.l. dlvd	lb	69	- —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b works	lb	.52	- —
USP, 100-lb. dms., frt. equald	lb.	1.25	- —
Trichlorobenzene, dms. c.l. frt. alld E	lb	15	—
dms., t.c.l. frt. alld E	lb	16	—
tanks, frt. alld E	lb	13¼	—
Trichlorobenzene prices in the West 1¾c. higher.			
1,1,1-Trichloroethane, dms., c.l., dlvd.	lb	13¼	—
dms., t.c.l., dlvd	lb.	.16	—
tanks, dlvd	lb	12¼	—
1,1,2-Trichloroethane, dms., c.l., works	lb.	.15½	—
dms., t.c.l., works	lb.	.16¼	—
tanks, works	lb.	.13½	—
Trichloroethylene, dms., c.l., or t.l., dlvd	lb.	.12½	- —
dms., t.c.l., dlvd.	lb.	.14	- .14½
tanks, dlvd.	lb.	.11¼	- —
Trichloroisocyanuric acid, dms., c.l., t.l., frt equald	lb	65	- —
dms. t.c.l. same basis	lb	75	- —
Trichlorophenoxyacetic acid (see 2,4,5-T).			
Tricholine citrate, 65% soln. ret. chys. works, frt adjusted.	lb	1.40	1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd	lb	.35	- —
dms., t.c.l., dlvd.	lb	.36	- —
tanks, dlvd	lb	32½	- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd	lb.	.35	- —
dms., t.c.l. dlvd.	lb.	.36	- —
tanks dlvd	lb.	32½	- —
Tridecyl alcohol, mixed isomers, dms. c.l. dlvd E	lb	26½	- —
dms., t.c.l., dlvd E	lb	28	- —
tanks dlvd E	lb	24	- —
Triethanolamine, dms. c.l., dlvd E	lb	24½	- —
dms., t.c.l., same basis	lb	26	- —
tanks, same basis	lb	22	- —
Triethanolamine lauryl sulfate, dms., c.l., t.l. frt alld	lb	25½	- —
dms. t.t.l. frt alld	lb	26½	- —
tanks, frt alld	lb	24½	- —
Triethylamine, dms. c.l., dlvd E.	lb.	.50	—
dms. t.c.l., same basis	lb	51½	- —
tanks, same basis	lb.	47½	- —
Triethyl citrate, refd., tech., non-ret dms. c.l., frt alld E. of Denver	lb	46¼	- —
non-ret dms., t.c.l., frt alld. E. of Denver	lb.	47¼	- —
tanks frt alld E of Denver.	lb.	43¾	- —
Triethyl phosphate, dms. c.l., dlvd.	lb.	40½	- —
dms. t.c.l., dlvd.	lb	42	- —
tanks, dlvd	lb	38	- —
Triethylene glycol, dms., c.l. dlvd. E	lb	.21	—
dms. t.c.l. dlvd. E	lb.	22½	- —
tanks, dlvd. E	lb.	.18½	- —
Triethylenetetramine, dms., c.l., dlvd. E	lb	.51½	- —
dms., t.c.l., dlvd E	lb	53	- —
tanks, dlvd E	lb.	.49	- —



The Long and Short of it:

The shorter film was cast from Airco's VINOL 125 polyvinyl alcohol; the longer, from a comparable grade of a competitive PVA resin. Both films were entirely immersed in 25°C water. Originally both samples were 10 cm long, 2 cm wide and 2.5 mils thick. Two hours later, the VINOL PVA film is 13.0 cm long; the other, 16.5 cm. In addition there is less swelling in the VINOL film.

VINOL POLYVINYL ALCOHOL RESISTS WATER BETTER

Because VINOL 125 resin is super hydrolyzed, films resist water better and retain more of their original strength and abrasion resistance. These properties are characteristic only of PVA produced by Airco's exclusive continuous manufacturing process.

If water resistance is important to your product — in textile finishing; paper sizing and coating; packaging films; protective coatings; binders; adhesives — you should consider VINOL 125.

For technical advice and samples of VINOL 125 call the Airco sales office nearest you.

SALES OFFICES: Berkeley, Calif., LAndscape 6-3365 • Charlotte, N. C., EDison 3-1157 • Chicago, Ill., Bishop 7-6100 • Cleveland, Ohio, MAin 1-3060
Houston, Texas, CApital 8-9353 • Los Angeles, Calif., ANgelus 8-2889 • New York, N. Y., MUrray Hill 2-6700 • Tampa, Fla., Phone 2-2034

AIR REDUCTION CHEMICAL & CARBIDE CO.

A DIVISION OF AIR REDUCTION COMPANY, INCORPORATED • 150 EAST 42nd STREET, NEW YORK 17, NEW YORK • MURRAY HILL 2-6700

AIRCO Vinyl Monomers, Acetylenic Chemicals / Calcium Carbide, Pipeline Acetylene / COLTON Vinyl Resins, Copolymers

Triisobutylene—Xylene

Triisobutylene, tanks, dlvd. .... lb. .08 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms. t.c.l., dlvd. E lb. .24¾- —
tanks, dlvd. E lb. .20¾- —
Trimethylamine anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 .305
tanks frt equald 100% basis, lb. .26 - —
25-40% soln. dms. c.l., frt. equald, 100% basis lb. .35 - —
dms. t.c.l. frt equald 100% basis lb. .35½- —
tanks, 100% basis frt equald lb. .26 - —
Trimethylolpropane dms., c.l., t.l., dlvd. E lb. .30½- —
dms., t.c.l., l.t.l., same basis .. lb. .31½- —
Trioxanes, pure, dms. c.l., t.l., works lb. .50 — —
dms. t.c.l., works lb. 51½- —
Tripentaerythritol bgs., c.l., t.l., dlvd. E lb. .34 - —
bgs., l.c.l., l.t.l., dlvd. E lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. 41½- —
bbls. t.c.l., frt. equald lb. 43½- —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene dms., c.l., dlvd. E gal. 44 - —
dms., l.c.l., same basis .... gal. .54 - —
tanks, same basis .... gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt. alld. E lb. .20¼- —
dms., t.c.l. l.t.l. frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt. alld. E lb. .17½- —

Tripropylene glycol, tankwagon and compartmented tankwagons, 1,000 gals. min. frt. alld. E lb. .18 - —
Tripropylene glycol prices 1c. per lb. higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, dms., 1 kilo, works, kilo.154.00 - —
Tung oil, dms., New York ..... lb. .31 - .31½
tanks, imported ..... lb. .29 - —
tanks, domestic, mills ..... lb. .29 - —
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 4.25 - —
Tungstic acid tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms., smaller lots, works lb 2.45 - —
Turkey red, bbls., works lb .62 — —
Turpentine, gum (see Protective Coatings market Naval Stores)
Turpentine oil, NF, cns., dms lb .28 .50
Tuscan red, bbls, frt equald lb .26 .32
Tyrothricin, USP, 1 to 5 kilos, gram .50 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb bbls., dlvd. E. of Rockies lb. .30½- .35
Jobbing types, dry, bbls., same basis lb. .16 - .22½
Regular types, dry bbls., same basis lb. .16 - .37½
Ultramarine blue prices 1c. higher W of Rockies.

Umber pigment, burnt, American, bgs., c.l., works lb. .07¼- .07¾
bgs., t.c.l., works ..... lb. .07¾- .08
Umber pigment, burnt, turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —
Raw, American, bgs., works .... lb. .07¾- .08¼
Turkey-type, bgs., works .... lb. .08½- .08¾
Undecylenic acid, 55-gal. dms., f.o.b. works lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., f.o.b. plant..ton.100.00 - —
bgs., l.c.l., f.o.b. plant ....ton.120.00 - —
45% N, agricultural, bgs., c.l. f.o.b. plant..ton.90.00 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton.120.00 - —
37 grade, tanks, same basis ton.145.00 - —
Urethane USP, dms., t.l., f.o.b., works lb. .65 - —
dms., l.t.l., same basis .... lb. .70 - —
Uva-ursi leaves, bls ..... lb. .12 - —

V

Valerian root, Belgian, bgs. .... lb. .32 - —
Indian, bgs .... lb .25 - —
dl-Valine, dms., 1 kilo, works kilo.37.00 - —
Vanadium pentoxide, tech., dms., works lb. 1.38 - —
Vandyke brown, bbls, works lb. 09½- .12
Vanilla beans, Bourbon, tins..... lb. 6.85 - 7.10
Mexican cuts, tins ..... lb. 7.25 - 7.50
whole, tins ..... lb. 7.65 - 8.50
Vanillin ex lignin, 100-lb. fib. dms., 2,000-lb. lots or more lb. 3.00 - —
less than 2,000 lbs..... lb. 3.20 - 3.30

Venetian red, jobbing, bgs., works lb. .6475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works..... lb. .0575- —
30%, bgs., works..... lb. .06 - —
35%, bgs., works..... lb. .0625- —
40%, bgs., works..... lb. .0675- —
Vetiver oil, Bourbon, cns.....lb.17.00 -17.25
Haitian, cns. .....lb.12.00 -14.00
Victoria blue toner, molybdated, PMA 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 - 4.95
Tungstated, PTMA, 250-lb. bbls., dlvd. E. of Rockies lb 5.55 - —
Victoria blue toner, bbls., prices 1c. higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .1810- —
55-gal dms., t.c.l., dlvd ... lb. .1960- —
tanks, dlvd. ..... lb. .1560- —
tanktrucks less than 4,000 gal., dlvd lb. .1610- —
Vinyl n-butyl ether, tech. dms., t.c.l., works lb. .50 —
Vinyl chloride monomer, tanks, works, min. frt. equald. E. lb. .6691- —
Vinyl ether, USP, anethesia, bots., 50cc., hospitals bot 1.12 -
bots. 75cc., hospitals bot 1.56 —
Vinyl ethyl ether tech., dms., c.l., works lb. .30¼- —
dms., t.c.l., works ..... lb. .31 - —
tanks, works ..... lb. .28¼- —
Vinyl propionate monomer, dms., c.l., dlvd lb 49 - —
dms., t.c.l., same basis lb 50 - —
tanks, same basis lb 47 - —
Vinyl trichloride (see Trichloroethane)
2-Vinylpyridine, 10 dms to tanks, works lb 1.20 - —
1 to 9 dms., works lb 1.35 - —
tanks, works lb 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., works. lb. .18½- —
dms., t.c.l., same basis lb. .18½- —
tanks, f.o.b. dest. frt prepaid lb. .14 - —
Viosterol in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. 02½- —
Virginia type red, bbls., works lb. 1.40 —
Vitiamin A acetate, syn., cryst., beads, 500,000 A units per gram gram .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.65.00 - —
325,000 units per gram, same basis kilo.43.88 - —
250,000 units per gram, same basis kilo.33.75 —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units 09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast)
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams vials, tins gram.45.00 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on gelatin, 100 and 500-gram bots on 1-5 kilo, dms., gram. .57 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots. 1-5 kilo dms gram. .57 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B^{12} activity gram.52.00 - —
0.1% trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo.52.00 - —
0.1% trituration of cyanocobalamin, USP, with dicalcium phosphate or mannitol gm.52.00 - —
USP solution of cyanocobalamin (500 micrograms per cc.) gram.52.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF, adsorbed on resin 500-gram bots. 1-5 kilo dms., frt. alld gram. .57 - —
0.1% cobalamin concentrate in gelatin 1-10 kilo dms., frt. alld gram. .57 - —
Vitamin C (see Ascorbic acid)
Vitamin D, (see Codliver and Fishliver oils, Calciferol and Viosterol)
Vitamin D, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
850,000 units per gram less than kilo lots kilo.45.00 —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin)
Vitamin K, active (see Menadione).
Vitamin K_1, 25-gram lots gram. 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha VM&P petroleum).

W

Wahoo root bark, bls. lb. 2.00 2.25
Warfarin, 0.5% dms., 50-lb. lots, dlvd lb 1.95 - —
dms. 25-49-lb. lots, New York or Chicago lb 2.05 - —
dms. 5-24-lb lots, New York or Chicago lb 2.15 - —
Watchung-type reds., bbls lb 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal dms. gal.12.25 —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls lb 21 - .23
White precipitate, USP, powd., dms., 100 lbs. f.o.b works lb 5.50 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .30 - —
Wintergreen oil, USP, nat. northern, cns lb 6.35 -17.50
USP, nat. southern cns lb 3.75 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls ..... lb. .30 - .35
Witch hazel leaves, bls lb. .75 - .80
Wollastonite, fine, paint grade, bgs., c.l., works ton.41.00 - —
bgs., t.c.l., ex whse ton.51.00 - —
Medium, paint grade, bgs., c.l. works ton.29.00 - —
bgs., t.c.l., ex whse. .... ton.39.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil)
Woolfat crude (see Degras).
Woolfat USP (see Lanolin).
Wormseed Levant bgs lb 2.50 - —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns..... lb. 4.75 - —

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. ..... gal .29 - —
Birmingham dist. ..... gal. .29 - —
Chicago dist. ..... gal .28½- —
Cleveland dist. .... gal .29 —

—Continued on page 40

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Consistency in Paint		Low	Low	Medium	Low	Medium Low	Low
Specific Gravity		5.95	5.85	5.85	5.75	5.75	5.70
Weight Per Solid Gallon (Pounds)		49.56	48.73	48.73	47.90	47.90	47.48
One Pound Bulks (Gallons)		0.02018	0.02052	0.02052	0.02088	0.02088	0.02106
Per cent Zinc Oxide (Approximate)		50	65	65	82	82	88
Per cent $PbSO_4$—PbO (Approximate)		50	35	35	18	18	12
Per cent Basicity (Expressed as Lead Oxide-PbO)		12–14	6.5–8.5	6.0–7.5	7–7.5	6–7	0.5–1.0
Specifications	ASTM	D80–41	D80–41	D80–41	D80–41	D80–41	D80–41
	Federal		TT-Z-321a	TT-Z-321a			

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Volume 179 March 6, 1961 No. 10

A LOOK AT THE FIGURES

Chemicals Production: How It's Going

		December 1960	December 1959
Acetic Acid, Synthetic	lbs.	60,038,771	60,365,528
Acetone	lbs.	64,385,852	66,281,870
Ammonia, Anhydrous	tons	424,092	419,733
Benzene	gals.	38,182,421	38,001,899
Chlorine	tons	363,814	379,524
Formaldehyde (37% basis)	lbs.	129,894,000	140,887,785
Methanol, Synthetic	lbs.	182,215,772	165,985,488
Phthalic Anhydride	lbs.	28,849,537	26,482,715
Sodium Hydroxide (Caustic Soda 100% NaOH)	tons	387,945	403,975
Sulfuric Acid (100% H_2SO_4)	tons	1,428,395	1,462,261

Sources: Tariff Commission, Bureau of Census

Remedying Strikes

The recent stagnation of this country's airline service by the striking of flight engineers did not inconvenience as great a proportion of the public as had been affected by other labor walk-outs. But, the segment affected was one of greater than average weight in several economic terms. That, plus the fact that the employing airlines had no part in what motivated the strikers—that came out of a thoughtlessly discriminatory ruling by the Federal Mediation Board—got the situation high-echelon attention in federal governmental areas—including the Secretary of Labor and the President whose intervention readily was responsible for the relatively rapid restoration of air service.

There has been all sorts of talk in all sorts of governmental circles in Washington following the resumption of airline service about how the administration will give prompt and active attention to any walking out by labor that deprives the public of a full, necessary measure of any utility service, especially in transportation. Some commenters even went so far as to see a possibility of such intervention in any publicly dis-serviceable condition which might result from the labor-management negotiations in the automobile industry, although most were inclined to believe that government would stay out of muss-ups in private industries.

Of course, there has been congressional reaction in the direction of public service. A bill was prepared about a week ago by two Republican senators that would give the government authority to seize strike-bound railroads or airlines. Just what it would, should or could do with the utilities was not made clear. Of course, it could put Air Force pilots in the jobs of operating the public service lines; but, railroading is something else again yet. One of its sponsors said that the bill also would "strengthen the government's hand in pre-strike negotiations." That is where some real effectiveness could be got. The remedying of strikes should be preventive, rather than curative. Strikes should be outlawed and labor should be forced to stay on the job until its dispute with management was adjudicated under a special system of arbitration which should be set up this year.

Dealing With the Reds

The attitude of the US chemical industry with respect to alleged left-leanings of the federal government under its declared restrictive policy on trading with the Soviet Union (concisely set forth on page 3 last week) deserves—yes, demands—broad, deep study in a conference of the national organizations of this country's productive and distributive enterprises with the Department of Commerce and the President's advisers in that area of international relations.

The chemical industry is not alone in its questioning of what appears to be, and is declared to be, a leftist tinge in at least the thinking of the President and of the US Ambassador in the United Nations. There has been expression of views along that line on the part of members of congress, one of whom has even gone so far as to attribute, wholly without support, to former President Eisenhower a feeling that the Kennedy administration is leaning to the left.

The President has been faced with a serious problem in Soviet relations because of the differences, theoretical and actual, in the policy inclinations of this country's major allies in the free western world. His sincere studies of the matter have led him to run closer to the views of the British, rejecting the basic belief in Paris and Bonn policy-making that the Khrushchev position is "impervious."

Mr. Kennedy goes along with the British view that Khrushchev can be made better—or far worse—by the obvious attitude in Western powers toward him. But, there is reportedly a growing belief in London that Mr. Kennedy has thoughts of a man-to-man meeting with the Soviet Mr. K. That belief does not reach far enough to provide any inkling of whether such a meeting would or could be good or bad for how many and for whom of those who are—must be—more or less concerned in that direction.

The rift between Russia and Red China presents one basis for endeavors—and reasons—to strive for some measure of expectation on what is or will be the Khrushchev outlook. The surprising move toward relations with both of the Communist giants on the part of the new administration in Brazil has a variously potential significance for Washington. Mr. Kennedy has had the better of it in all of his controversies with the Russian premier, in none of which has he evidenced any left-leaning. There is reason to believe that when—and if—the complaint of the chemical industry gets to his attention, somebody will give the Department of Commerce some different advice.

But, there is more than curiosity to induce all economic groups in this country—political, commercial and social—to endeavor to realize what motivated the American Academy of Political & Social Science to select for discussion at its annual meeting next month the topic: "Is International Communism Winning?"

Re That Recession

There is a recession in this country. Those who are looking at it from political points of view are going "all over the map" with suggestions on what to do about it. Judging from what they have to say—or try to say—one is forced to the conclusion that they know very little, if anything, about what it is.

The recession is what should have been a clearly expectable consequence of the obvious fact that production was being enormously overdone over the past year or two. So, why is it that the anti-recession policy of the big shots in politics—and in labor—is based on the theory that production must be boosted?

The consequent expansion of joblessness is being approached by way of all sorts of legislative pathways, none of which, according to labor, will or can do enough—if any—good. Seeing as how the trouble is not of political origin, and legislation is quite largely such, the labor evaluation is close to correct.

Well, what is to be done?

Private enterprise must create more jobs—not by boosting production, but by training selected members of its excessive production forces in areas of the imperatively essential complement (distribution)—and putting them to work at it.

Washington Talks It Over

Chemical Men May Be Nothing More Than Bystanders as ICC Goes About Getting Itself Reorganized, But Any One of These Days They Should Find That the Blessings Are Beginning to Flow.

By Ralph L. Cherry
Washington Editor

The chemical industry may have nothing more than a bystander's interest in the reorganization now going on in the Interstate Commerce Commission, but, when the thing is over with, producers and shippers may find some real benefits flowing therefrom.

Stung by the criticisms of the Landis report on the regulatory agencies and those of other investigators in the past, ICC is currently undergoing a face-lifting job of no mean proportions.

New boards are being set up with decision-making authority and commissioners are being relieved of much administrative detail with the laudable objective of eliminating the interminable delays that have plagued the agency's operations in the past.

Aside from the over-riding function of passing on transportation rates and charges, ICC's major point of interest to the chemical industry is in its regulation of the transportation of explosives and dangerous articles.

Among the changes being made to modernize the agency's operating techniques, is the setting-up of a decision-making board in the explosives division which promises to cut weeks off the time it has taken in the past to act on industry's requests for changes in the transportation rules.

All the details of the board's functioning haven't been worked out as yet, but present indications are that it will operate quite informally without the formality of hearings and its rulings will become final unless appealed to higher authority.

In the chemical industry where competition is so keen and where the new products and containers are constantly being developed and introduced into the market, the matter of time that it takes for the agency to reach a decision becomes of increasing importance.

ICC began its revamping early in January, soon after James Landis blasted the agency in a report to President Kennedy, with the announcement that the right of appeal to the full commission from the decisions of hearing examiners and employee boards would be limited to issues of general transportation importance.

Since then it has set up eight employee boards to handle much of the work formerly done by the commissioners themselves, established the office of vice-chairman and has asked congress for authority to delegate still more of the work to staff operations. The changes have the approval of Mr. Landis.

OPD'S BOOKSHELF

Facts on Figures

Since the US government is by far the largest publisher of statistical data in the country, with information pouring from countless departments and bureaus, there is need for an overall guide to this voluminous output. And here it is—the third revised and enlarged edition of GUIDE TO US GOVERNMENT STATISTICS*. The guide fulfills its purpose of bringing order out of mathematical chaos, serving as a compact but comprehensive reference tool for those interested in obtaining any type of data.

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Heavy Chemicals

Sulfur Industry's Sales Confidence Emphasized by Tanker Fleet Growth

Docking at Tampa, Fla., last week, the sulfur industry's second ocean-going tanker unloaded 16,100 tons of molten sulfur (see story on page 5) and offered further evidence that this is one industry confident enough of its favored marketing position during these recession days to move ahead with ambitious expansion plans. The tanker represents just one phase in a company's $23 million investment program in liquid sulfur transportation. Source of the industry's confidence is two-fold. First, the $2 advance that looked so shaky a while back, has taken firm hold, a second producer reporting last week that his contracts should show the full effect of it by July 1—start of the third quarter.

Then, on the marketing front, though trade sources freely concede downturns in steel, rayon and rubber, these industries at most account for 12 percent of crude sulfur consumption. Against this, there's a booming season shaping up for fertilizer, which amounts to about 30 percent of sulfur business; and a good demand in chemicals, estimated at 25 percent of the industry's market.

Sulfuric Movement to Steel Makers

Movement of sulfur (as sulfuric acid) to the steel industry has been running at about half of last year's volume. This works out to a decline of 2.5 percent in total sulfur consumption. But since last year's steel operations at this time were far above normal, the drop of sulfur consumption under normal levels is more like 1 percent.

Rayon makers, hit hard by nylon's invasion of the tire cord market last year, not only survived but recently posted a price advance. As it stands now, nylon has sewed up the replacement market, with nearly 100 percent of the business, and rayon stands firm with the entire original equipment market. One source estimates that this represents about 40 percent of rayon sales and 3 percent of sulfur consumption.

The only present threat to rayon, then, is a prolonged downturn in automotive production, and that's not very likely.

Reporting on refined sulfur, one trade source finds the market running slightly behind last year's level. This he attributes to the automotive downturn which has contracted demand for ground and refined rubbermakers' sulfur. However, from the point of view of crude sulfur, this represents a marginal loss of business.

Other refined outlets—sugar bleaching and refining, food-processing, matches, caulking compounds—have had no trouble holding to their pre-recession pace, this source says.

After allowing that "it's too early to tell," producers of crude sulfur report their sales as just about even with last year to slightly lower. In the latter category are producers whose business is more closely tied to the east coast sulfuric acid industry, which supplies the steel makers.

Acids

Hydrochloric—Good consuming demand is reported in chlorinated solvent outlets, and food processing accounts remain briskly active. In the eastern area of the country, where the depressed steel situation hurts most, competition for available business remains keen, but no deterioration of price levels has been reported.

Hydrofluoric—The report on January aluminum production shows a continued high level of activity in that industry, meaning sustained demand for hydrofluoric. Aluminum makers are counting on business in new outlets to take up the slack in their supply position.

Paper Production Lower

The American Paper & Pulp Association reported paper production for the week ended February 25, at 87.0 percent of theoretical capacity, as compared with the revised figure of 88.3 percent for the previous week and 96.5 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
Tin metal (Straits), 1c. per lb.
Salts, ½c. to ⅜c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 4, 1960
130.49	*130.49	131.51	132.54

For Current Prices see Page 10

Sulfuric—A glance at the current marketing picture shows steel and rayon as the only real soft spots, but for some sulfuric producers these are soft spots enough. Doing well are fertilizer and chemical manufacturers, who together absorb at least half of all sulfuric output, and the petroleum industry. Paint business varies from slow to moderate.

Bases and Salts

Caustic Soda—Business is running along evenly. Producers report that the rayon market is just about the same as last year, and that the struggle between nylon and rayon for tire cord business has reached a static position, with nylon holding nearly all of the replacement market and rayon retaining the OEM outlet.

Chlorine—A seasonal pick-up in demand was noted last week as paper and pulp makers stepped up output with the advent of warm weather.

Lime—Production of open-market and captive lime totaled 877,598 tons in December, lowest for any month in the year, the Bureau of Mines reports.

This figure was 12 percent below the 1,001,314 tons turned out in December a year ago, Mines notes, and 21 percent below April 1960 (1,107,134 short tons), the highest month on record.

For 1960 as a whole, lime output totaled 11,895,318 short tons, up sharply from 9,310,527 in 1959. About two-thirds of the 1960 total was open-market lime and the balance captive material.

The 1960 output, a record level, was achieved by a sharp increase in chemical and industrial consumption; all other outlets, Mines notes, declined.

Soda Ash—Dense ash sales have picked up briskly with the start of seasonal activity by the glass bottle industry which is accumulating inventory for the summer trade. Light ash is in fair demand, unchanged from the pace prevailing since the start of the year.

There has been no word yet on the price outlook for the second quarter, but though the industry is known to be operating on a narrow profit margin, informal comments from the trade rated chances for a price advance as very slim.

Sodium Nitrite—Prices will be advanced 15c. a hundred pounds, effective April 1, by a major producer.

New car lot and truckload prices will be $9.15 a hundred pounds for 100-lb. bags, and $9.40 for 400-lb. fiber drums, f.o.b. works, freight equalized. This is the first increase in prices since October, 1957.

Sulfur Chlorides—Prices on drum shipments of sulfur mono- and dichloride will be advanced ¼c. in carlots and ½c. in less than carlots effective March 10 on spot and April 1 on contract. The increase reflects higher packaging and handling costs.

Consuming demand has fallen off slightly with the general trend of business, trade sources report. Supplies are amply available.

Sulfur Dioxide—Prices of liquid sulfur dioxide will be advanced on April 1 to 10 cents a pound for truckloads, 11 cents a pound for six or more cylinders and 13 cents a pound for one to five cylinders, a major company reported. This reportedly is the first price increase in 150-pound cylinders since 1950.

The company is also discontinuing its metropolitan delivered prices in Boston,

Heavy Chemicals

New York, Detroit and Chicago; pricing all shipments on an f.o.b. West Norfolk, freight equalized basis.

Nonferrous Metals

Aluminum—Industry kept the throttle wide open in January, turning out 161,427 tons of the light metal, down only slightly from last January's 164,024 tons and December's 165,504 tons, the Aluminum Association reports.

The all-time record month remains July 1959, with 180,287 tons, and the all-time record quarter the third of 1959 with 521,309 tons turned out, the Association notes.

Antimony—Preliminary 1960 figures from the Bureau of Mines indicate consumption of about 12,500 tons of antimony for the year, or 6 percent less than in 1959. Of this total, metal products took approximately 56 percent, and nonmetal products 44 percent.

Tin—Prices dropped 1c. per lb., closing at $1.02 per lb.

Zinc—A major smelting company has announced a 15 percent curtailment of slab zinc production. The curtailment has been forced, the company says, by excessive imports of zinc into the United States market at low prices. The "drastic effect" of such imports is said to have become more pronounced.

Late in the week, a second company said it was cutting output by 11 percent at its principal refinery.

News Briefs

PENNSALT SALES SERVICE: Pennsalt Chemicals Corporation has transferred its sales technical service groups to new and expanded laboratory facilities at 900 First Avenue, King of Prussia, Pa. These groups were previously located at the company's Whitemarsh Research Laboratories, Wyndmoor, Pa., and at Devon, Pa.

KAISER FIRE BRICK: A new, complete line of insulating fire brick is now in commercial production by Kaiser Refractories & Chemicals Division of Kaiser Aluminum & Chemical Corporation. Six lines of brick, designed to cover exposed service temperatures ranging from 1600 degrees to 2900 degrees Fahrenheit, are available from the company's sales offices, warehouses and authorized distributors.

ASH AND GLASS: Domestic shipments of glass containers in 1960 established an all-time high of 20.3 billion units, an increase of 2.5 percent over 1959's 19.7 billion units. The figures are reported by Glass Containers Manufacturers Institute, representing thirty-six manufacturers and over 90 percent of the industry's production.

ALUMINUM RIVER BOAT: Reynolds Metals Company has awarded a contract to Todd Shipyards Corporation for construction of the first aluminum barge to be built in the US. The barge will be leased to Industrial Marine Service, Memphis, Tenn., which will use it on the Mississippi-Ohio river systems to carry Diamond Alkali Company products.

OME ON THE RANGE: The government's program of mineral exploration has been a profitable enterprise for the country. According to the latest report from Interior's Office of Mineral Exploration (OME), for every government dollar spent, $25 in ore values has been discovered. At present market value, OME reports, the net recoverable value of ore reserves discovered stands at about $935 million.

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Pesticides, Additives Win FDA's Approving Nod

Residues for two chemical pesticides and for a chemical additive in animal feeds were approved last week by Food & Drug Administration.

On a petition of E. I. duPont de Nemours & Co., Wilmington, Del., FDA issued a tolerance of seven parts per million for residues of the chemical pesticide "Thiram," in or on celery.

Union Carbide Corporation, New York, was issued a tolerance for residues of 1-naphthyl N-methyl carbamate in or on filberts at five parts per million.

Dow Chemical Company, Midland, Mich., applied for and received approval for a tolerance of twenty parts per million for sodium 2,2-dichloropropionate in dehydrated citrus pulp for cattle feed when its presence therein is the result of application of the chemical to the growing of grapefruit, limes, oranges and tangerines.

Fertilizer Expansions

—Continued from page 3

agricultural fertilizer field has been at Prayor, Okla., where it produces synthetic nitrogen.

Summers has acquired the manufacturing facilities, inventory and trade name of the Aroostock Hi-Test Fertilizer Company, of Presque Isle, Me.

Aroostock reportedly pioneered in the formulation and use of double and triple strength mixed fertilizers in Maine. Established in 1927 as Higgins Fertilizer Company, the firm was subsequently reorganized as a farmers' cooperative.

Facilities of the Presque Isle plant and office will be operated as the "Hi-Test Division" of Summers Fertilizer. The management will remain the same with W. R. Edgecomb as general manager and Harry Trask as sales manager.

Summers already has plants at Houlton and Mars Hill, Me., from which it services customers in southern and central Aroostock county. The newly-acquired unit serves the north central area of the country.

Propane Storage Cavern Started at Princeton, Ind.

Texas Eastern Transmission Corporation has started mining a 150,000 barrel underground propane storage cavern at the Little Big Inch terminal at Princeton, Ind.

The cavern and loading facility at the terminal will serve the tri-state area of southeastern Illinois, southwestern Indiana, and northern Kentucky, and will be completed in time for the 1961-62 propane season, the Houston, Tex., company states.

Gases for Petrochems

—Continued from page 5

the company. In contrast to an on-site plant which serves a single customer and is located on his property, the "over-the-fence" plant in built adjacent to a principal customer's property, supplying his full needs but also shipping to other companies in the area.

Airco cities these advantages of the new concept:

- No capital investment is required of the customer, leaving him extra funds for plant expansion.
- The larger capacity of a multiple-customer plant often means that the product can be obtained more economically.
- Should his requirements increase, further quantities are always available.

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Obituaries

Osborne Bezanson

Osborne Bezanson, retired president and board chairman of Chemstrand Corporation, New York, died February 27 in Boston, Mass. He was seventy-two years old.

Mr. Bezanson was president of Chemstrand from 1951 to 1953, and then chairman until 1955.

He began his career in 1906 as a laboratory assistant with Merrimack Chemical Company, which later became a division of Monsanto Chemical Company, and continued with Monsanto for forty-five years before moving to Chemstrand. Mr. Bezanson was made a vice-president and director of Monsanto in 1942 and was elevated to the executive committee in 1948.

William H. Ward

William H. Ward, a director and former vice-president of E. I. duPont de Nemours & Co., Wilmington, Del., died March 1 in Swarthmore, Pa. He was sixty-eight years old.

Mr. Ward retired as vice-president and a member of the executive committee in 1957, after a career of more than forty-two years with the company. In World War II, as general manager of the explosives department, he was in charge of important military work for the government.

He joined duPont in 1915 as a chemist and in 1923 became assistant to the chemical director of the explosives department. After serving in the sales division as manager of the St. Louis, Mo., office, he returned to Wilmington in 1930 as assistant sales director of the explosives department.

From 1935 to 1944, Mr. Ward was assistant general manager of the explosives department and for the next four years was general manager. In 1947 he became a vice-president, a director and a member of the executive committee.

George H. Bardsley, administrative assistant to the controller of Standard-Vacuum Oil Company, New York, died March 1 in Port Chester, N.Y. He was fifty-two years old.

Wolston C. Dougan, regional sales manager of the Dobeckmun Division of Dow Chemical Company in New York, died March 1 in that city. He was fifty-two years old.

Elden Bennett Hartshorn, professor emeritus of chemistry at Dartmouth College, died February 27 in Hanover, N. H. He was seventy-one years old.

William E. Kennedy, retired executive vice-president of Anaconda Sales Company, died February 26 in New Haven, Conn. He was seventy-four years old.

Plant Expansions Increase

—*Continued from page 5*

adds, is the fact that this expansion is going on "in the face of declining net earnings in 1960 for chemicad manufacturers."

But this turns out to be the only area in which "the outlook is not as bright as it might be."

In contrast, chemical sales have hit an all time high of $27.7 billion, and with construction funds running at the second highest level in history, Mr. Hull can characterize the outlook for consumption of chemical products as "probably the brightest ever."

Within the total $3.5 billion for construction, MCA reports that:

- More than $1 billion was spent on facilities completed in 1960.
- $1.7 billion was appropriated for facilities under construction in 1960, and
- $772.4 million is planned for construction in 1961.

These totals represent a sizable increase over comparable figures in the 1959 survey released at this time last year.

At that time, MCA stated that total expenditures were expected to hit slightly more than $3 billion.

Of the 1959 total, $1.3 billion went into facilities completed that year, $1.2 billion was being spent on new facilities and expansion of existing plants in 1959 and 1960, and an additional $485.5 million was planned for 1960.

The 1960 survey includes only privately financed projects and covers a total of 348 companies, 111 of which are companies whose primary operations are in fields other than chemicals, such as steel, automobiles, paper and pulp, and petroleum.

"The fact that more than 30 percent of the companies with new plants and expansion construction in the chemical field are outside the industry proper emphasizes the intense degree of competition in the chemical-producing field," Mr. Hull states.

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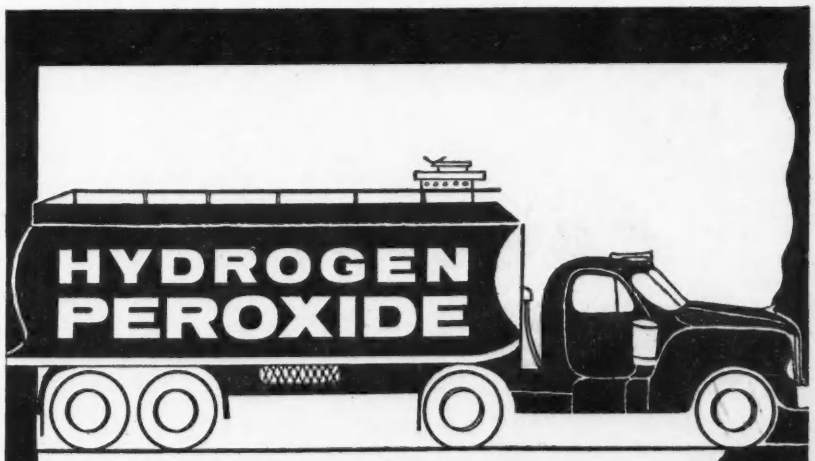

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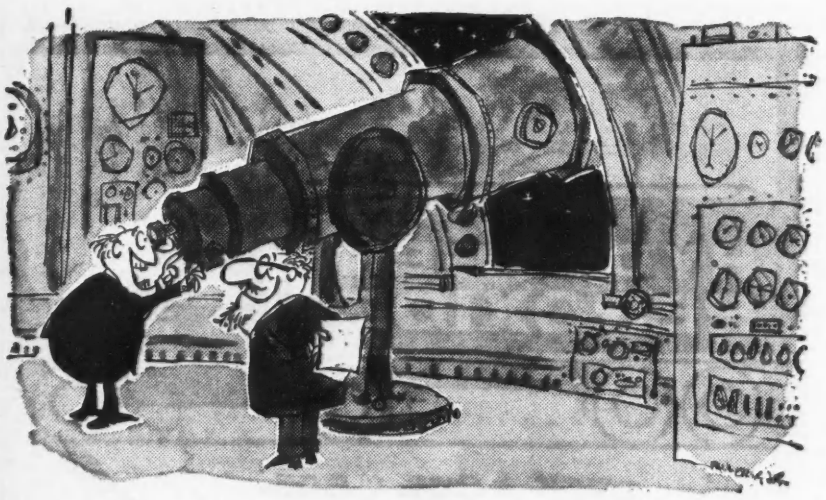

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Aliphatic Organics

Price changes in this market section last week were confined to calcium propionate and sodium propionate as detailed below. Large volume organic solvents and intermediates remained unchanged from price levels which have largely prevailed over recent months. The marked price stability in aliphatics is very much a result of competitive influences in a market characterized by abundant supply. Costs of manufacturers for labor, manufacturing, and shipping have been steadily advancing. However, since supplies are so plentiful, the competitive situation, made somewhat worse by recent declining demand, prevents any upward price adjustment regardless of how severely needed it is. The result is a squeeze in profit margins, in many cases almost to the vanishing point.

While continuing to absorb constantly rising costs presents a problem even when plants are operating at virtual capacity, the situation is currently aggravated by declining demand in January and particularly in February on organic solvents such as the ketones and esters, and on some of the large volume intermediates such as butadiene and formaldehyde.

One of the currently interesting commercial developments in aliphatic chemicals is in the field of polymer development from itaconic acid—now at lower prices—capitalizing on the technical advantage of its second carboxyl group which exhibits less steric hinderance because it is linked to the polymer chain through a methylene group. Methyl and buthyl esters of itaconic acid are now commercially available which are capable of yielding some interesting new type molding plastics in combination with styrene, and with styrene and acrylonitrile. Improved acrylic lacquers are said to be made available by use of these esters on a partial replacement basis.

Acetone—Supplies were more than adequate to meet all demands. Demand, in fact, was off during February due to lowered operations of consuming industries and the tendency of those industries to reduce inventories to a minimum. Plastic consumption in the automotive industry has been reduced by two factors: one, the curtailment of the number of cars currently under production, and secondly by the higher percentage this year as compared to last, of the number of compact cars in relation to total output. Each compact uses less of plastics and other items than a standard model.

Butadiene—Demand for butadiene for the manufacture of synthetic rubber nas dropped off significantly in line with the decline in synthetic rubber output generally. The feeling in the industry is tnat demand for butadiene was off some 15 percent in January and more than this in February.

However, if automotive production increases in the months ahead according to expectations, demand for synthetic rubber will increase and consequently so will the need for butadiene. The drop in demand for butadiene by consuming plants is far from uniform, some plants being off very sharply and others not much more than slightly.

Calcium Propionate — New price for both calcium and sodium propionate is 37c. a pound, delivered in the East, beginning March 1. The 2½ cents a pound advance was announced by two major manufacturers.

Maintaining the 3 cent differential, west coast delivered price is 40c. a pound.

Ethyl Alcohol—Alcohol business volume held up somewhat better than most solvents and organic intermediates, perhaps due to its tremendously wide end use pattern. While some end uses were down, others either held up well, or in a few cases increased. This made the overall demand pattern not too discouraging at this point. Prices in effect over recent months were unchanged, and no change was expected in the immediate future.

Itaconic Acid and Esters—Methyl and butyl esters of this dibasic acid are now commercially available in 500 pound drums at 41c. per pound f.o.b. producing plant. These esters are of interest in the development of molding compounds and of coatings. For example, the new Italian plastic marketed as "Dialux" is a copolymer of 60 percent styrene and 40 percent dimethyl itaconate. The Italians also market an oil resistant copolymer composed of roughly 60 percent styrene, 30 percent dimethyl itaconate and 10 percent acrylonitrile.

While such copolymers are good according to evaluations made by firms in this country, they are said to not be as good as straight alkyl acrylic copolymers such as "Lucite" or "Plexiglas." In coatings such as acrylic lacquers, research indications are that some improvements technically, in performance, are obtained by replacing of the part of the alkyl acrylate binder with alkyl itaconates.

Itaconic acid is a product, which as more commercial interest develops, is likely to be made by other synthetic citric acid producers. At least two such producers of citric acid have indicated that they are interested in it. This, of course would assure more than ample supply.

Itaconic acid itself is of major interest in polymers, and development chemists are studying them with renewed vigor. While itaconic acid itself has been around for a long time, since around 1938 commercially, its polymeric merits were long overlooked, partly because of its high price. Just recently the refined grade was reduced to 39½c. per pound in carlots and the technical grade to 34½c. per pound in carlots, f.o.b. producing plant.

From a technical standpoint, the interest in itaconic polymers derives from the fact that, comparing it with methacrylic polymers, it has an extra carboxyl group replacing a hydrogen in the polymer chain. Like the methacrylic polymer, an itaconic polymer has a carboxyl group attached to

Price Trends

Advanced
Calcium propionate, 2½c. per lb.
Sodium propionate, 2½c. per lb.

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Mar. 5, 1960
130.53	130.49	130.51	132.42

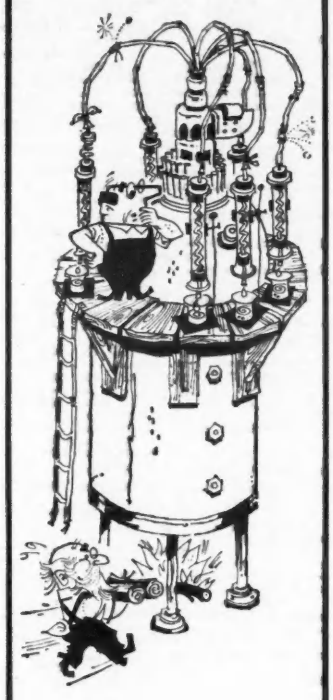
For Current Prices see page 10

Organic Chemicals Output: December

The following figures, in pounds, represent output of specified organic chemicals in November and December, 1960, as reported by the Tariff Commission.

	November	December
Acetic Acid:		
Synthetic	61,000,329	60,038,771
Natural (wood distillation)	*1,878,000	1,524,000
Acetic anhydride	81,491,102	80,059,523
Acetone	61,782,915	64,385,852
Acrylonitrile	13,501,155	14,763,249
1,3 Butadiene (rubber grade)	139,444,866	136,013,615
Carbon disulfide	41,742,351	42,629,690
Carbon tetrachloride	31,538,444	27,394,113
Ethanolamines (Mono-, di-, and tri)	9,442,917	7,363,675
Ethyl acetate (85 percent)	7,102,566	5,775,231
Ethylene glycol	104,938,581	108,791,633
Formaldehyde (37 percent by weight)	*135,528,758	129,894,000
Methanol:		
Synthetic	166,337,454	182,215,772
Natural (wood distillation)	*1,115,520	1,135,440
Pentaerythritol	5,178,249	5,051,662
Perchloroethylene	17,441,575	15,656,024
Propylene glycol	8,690,493	.....
Trichloroethylene	29,488,850	26,523,475

* Partly estimated.



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Aliphatic Organics

the chain, being connected to the polymer chain through a methylene group. This gives the second carboxyl less steric hinderance by the carboxyl group and any other groups on the polymeric chain.

Among many results is improved stability in latices with respect to freeze/thaw and also with regard to mechanical sheer. The greater access of the second carboxyl also tends toward better adhesion of the latex to the substrate.

Methyl Ethyl Ketone—While business volume in January could certainly be described as fair, or even good, demand fell off in February to a point where it could hardly be described as much more than poor to fair. This was partly due to the cutting back of inventories by consuming industries. However, the feeling is held in most quarters that the general business decline in the hard goods industries, particularly those requiring plastics, or lacquer coatings, is responsible.

The curtailment of automotive production and the higher percentage of compact purchases to regular models this year as against last, are factors in lessened overall demand. The appliance industry has been plagued by slow sales volume resulting in production cutbacks, and the same is true of many other durable goods industries.

However, the outlook is for an upturn in March over February business volume levels. Prices are holding firm and unchanged from what they had been over recent months. With labor manufacturing and shipping costs continually on the rise, profit margins have been cut severely. Yet the competitive situation is such that much needed upward price adjustments cannot be made.

Molasses—According to the Agricultural Marketing Service of the Department of Agriculture, the domestic portion of total 1960 molasses supplies amounted to about 263,000,000 gallons, or 37 percent of the total. In 1959 the figure stood at 273,000,000 gallons or 49 percent of the total. Of the 1960 263,000,000 gallons some 189,000,000 gallons came from mainland sources and nearly 75,00,000 gallons were shipped in from Hawaii and Puerto Rico.

Mainland cane mills produced in 1960 an estimated 46,000,000 gallons of blackstrap, a 7 percent increase over 1959. Overall mainland molasses output for 1960 is estimated at a total of 188,686,000 gallons breaking down as follows: 46,000,000 gallons of cane; 73,000,000 gallons of beet, 40,686,000 gallons of refiners blackstrap; 6,000,000 gallons of citrus; and 23,000,000 gallons of hydrol.

Shipped in from the territories were 49,712,000 gallons from Hawaii and 25,000,000 gallons from Puerto Rico, for a total of 74,712,000 gallons.

Imports of molasses in 1960 totaled some 449,274,000 gallons from various countries as follows: Cuba, 228,271,000 gallons; Dominican Republic, 62,281,000 gallons; Mexico, 75,635,000 gallons; and other countries in the amount of 83,087,000 gallons. Exports from the mainland amounted to some 3,032,000 gallons. This left an estimated 1960 overall molasses availability of around 709,640,000 gallons.

Sodium Propionate—Effective March 1 the price of this material advanced 2½c. per pound, bringing present schedules to 37c. per pound delivered in the East. Prices on the West Coast are likewise advanced 2½c. per pound, maintaining the usual 3c. per pound differential bringing West Coast prices to 40c. per pound.

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See page 130—1961 Chemical Materials Catalog
See page 73—1961 Buyer's Guide Issue

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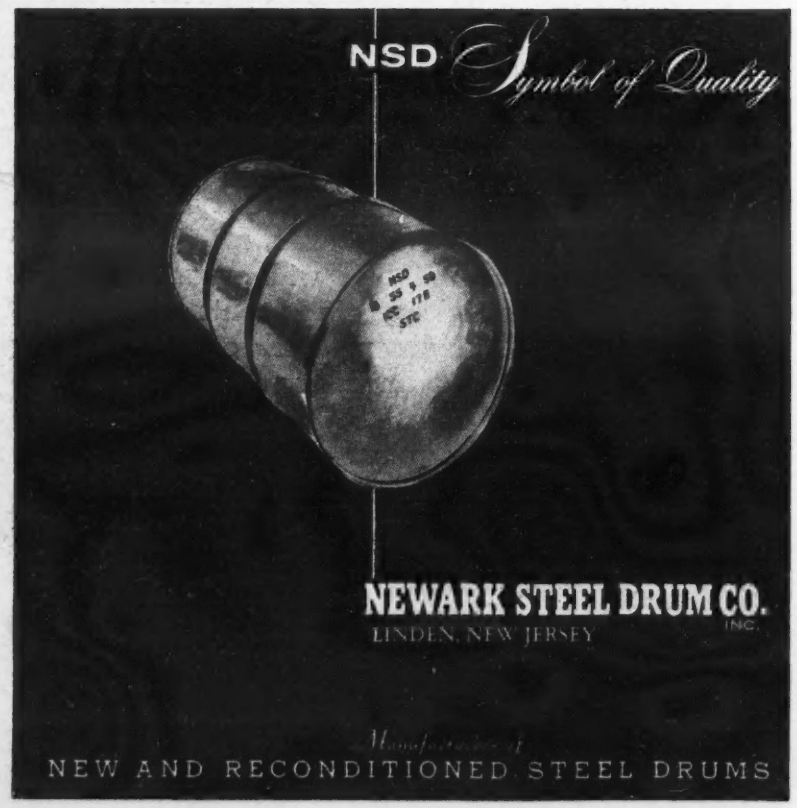

Current Market Quotations

—Continued from page 32

Xylene, coaltar, indus., tanks, works:			
Geneva, Utah	gal.	.29 -	—
Johnstown, Pa.	gal.	.29 -	—
Lackawanna, N.Y.	gal.	.29½-	—
Lone Star, Tex.	gal.	.27 -	—
Lorain, Ohio	gal.	.29 -	—
Middletown, Ohio	gal.	.30 -	—
Xylene, coaltar, indust., tanks, works:			
Minnequa, Col	gal.	.29 -	—
Philadelphia dist.	gal.	.29 -	—
Pittsburgh dist.	gal.	.29 -	—
Sparrows Point, Md.	gal.	.29 -	—
Terre Haute, Ind.	gal	.29 -	—
Youngstown, Ohio	gal.	.29 -	—
Xylene, petroleum, indust., tanks f.o.b works:			
Bayonne N J	gal.	.29 -	—
Baytown, Tex.	gal.	.27 -	—
Charleston, S. C.	gal.	.29 -	—
Chicago, Ill	gal.	.28½-	—
Detroit, Mich., dlvd	gal.	.27½-	.29
Houston, Tex.	gal.	.27	—
Philadelphia, Pa.	gal.	.29 -	—
Providence, R. I.	gal.	.30 -	—
Sewell's Point, Va.	gal.	.28 -	—
Wood River, Ill	gal.	.28½-	—
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif.	lb.	.21 -	—
dms. t.c.l. f.o.b., Richmond, Calif.	lb.	.22 -	—
tanks, frt. alld.	lb.	.19 -	—
o-Xylene, dms. c.l., works	lb	.08 -	—
dms., t.c.l., works	lb	.09 -	—
tanks, works	lb.	.06 -	.06½
p-Xylene, dms., c.l., works	lb.	.20 -	—
dms., t.c.l., works	lb.	.21 -	—
tanks, frt alld	lb.	.1645-	—
Xylenol cryst. 45°-47°C., m.p., dms., t.c.l., works, frt. equald	lb.	.23 -	—
56°-58°C., m.p. dms., t.c.l., works, frt equald	lb.	.33 -	—
Xylenol, cryst., 60°-62°C., m.p., dms. t.c.l., same basis.	lb.	.40 -	—
Xylenol fraction, b.r 7°-9° C., dry above 227° C., dms., c.l., same basis	gal	1.25 -	—
dms., t.c.l. same basis	gal	1.30 -	—
tanks, same basis	gal	1.05 -	—
b.r 7°-9° C., dry at or below 227° C., dms c.l. same basis.	gal.	1.35	—
Xylenol fraction, b.r 7°-9° C., dry at or below 227° C., dms., t.c.l. same basis	gal	1.40 -	—
2,4-Xylidine, tech. dms. frt alld	lb.	1.15 -	—
2,5-Xylidine, tech. dms. frt alld	lb	1.20 -	—
Xylidines, mixed o-m-p, dms., c.l., or t.l., works	lb	.39 -	—
dms., t.c.l. same basis	lb	40 -	—
tanks, same basis	lb.	.38 -	—

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene

Y

Yara yara oil, cns.	lb	2.15	3.05
Yeast, brewers, debittered, USP XV, Saccharomyces, dlvd	lb.	.27	—
Yeast, brewers, primary, USP XV, 150 meg B¹ per gram, 100-lb. dms	lb.	.47 -	—
USP XV, 270 mcg. B¹ per gram 100-lb dms	lb.	52 -	—
Yeast, brewers, primary, USP XV, 300 mcg., B¹ per gram, 100-lb. dms	lb.	.56 -	—
USP XV, 900 mcg. B¹ per gram 100-lb dms	lb	60 -	—
Torula USP dlvd	lb	.18	—

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves bls	lb	40	45
Ylang-ylang oil Bourbon bots	lb	7.00	-22.00
Ylang Ylang oil, Bourbon, extra bots	lb.	24.00	-33.00
Yohimbine hydrochloride, bots., tins	oz.	3.75	4.25

Z

Zein, 50-lb. bgs., c.l., t.l., f.o.b. works	lb.	.37 -	—
50-lb. bgs., smaller lots, f.o.b. works	lb.	.41 -	.44
Zinc acetate, NF, VIII, dms	lb.	.53	—
Tech., dms., l.t.l., works	lb.	.2950-	—
Zinc borate bgs. 1,000 lbs or more, works	lb.	.25 -	—
bgs. less than 1,000 lbs., same basis	lb.	.27 -	—
Zinc chloride NF, gran., dms	lb.	.42 -	—
NF, precip., powd., dms	lb.	.26 -	—
Tech., soln. 50%, dms., c.l., works 100 lbs		5.80 -	—
dms., t.c.l. works 100 lbs		6.40 -	—
tanks, works 100 lbs		5.15 -	—
fused dms. c.l. works 100 lbs.		10.70 -	—
dms., t.c.l. works 100lbs.		11.20 -	—
gran., fib dms. c.l., works 100 lbs.		11.45 -	—
fib dms. t.c.l. works 100 lbs.		11.95 -	—
Zinc chromate bbls., dlvd.	lb	.29 -	—
Basic bbls. dlvd.	lb	.34 -	—
Zinc cyanide dms., 1,000-lb. lots or more, works	lb.	.55 -	—
dms., smaller lots, works	lb	.57 -	—
Zinc dust coml bbls., c.l. works.	lb.	.16 -	—
Pigment, bbls., c.l., works	lb.	.15½-	—
bbls., t.c.l., works	lb.	.17¼-	—
Zinc fluoride, bbls. works	lb.	.49	.50
Zinc hydrosulfite, dms. c.l., frt. alld	lb.	.21½	—
dms. t.c.l. frt. alld	lb.	.23½	—
Zinc metal, prime western, slabs, E. St. Louis	lb.	.12	Nom.
Prime western slabs, New York.	lb.	.12½	Nom.
Zinc naphthenate liq 8% Zn., dms., frt. alld	lb.	.27 -	—
10% Zn., dms., frt alld	lb	.33 -	—
Zinc nitrate, tech., flake, 100-lb. fib dms., t.c.l.	lb.	.16½-	—
300-lb. fib. dms. t.c.l.	lb.	.14½-	—
300-lb. fib. dms., c.l.	lb.	.14 -	—
Zinc oxide pigment, American process, lead-free bgs. c.l., frt. alld	lb.	.12½-	—
bgs., t.c.l., 10 tons or more, same basis	lb.	.13 -	—
bgs., t.c.l., smaller lots, same basis	lb.	.13½-	—
Zinc oxide, leaded, 35% bgs., c.l., mills, frt. alld	lb.	.13⅜-	..
bgs., t.c.l. 10 tons or more, same basis	lb.	.13¾-	—
50%, bgs., c.l., same basis	lb.	.13¾-	—
pigment, American process, leaded, 50%, bgs., t.c.l. 10 tons or more, same basis.	lb.	.14½-	—
Zinc oxide, pigment, French process, green seal, bgs., c.l., mills, frt. alld	lb.	.14½-	—
bgs., t.c.l. 10 tons or more, same basis	lb.	.15¼-	—
Zinc oxide, French process, green seal, bgs., t.c.l., smaller lots, same basis	lb.	.15¼-	—
red seal, bgs. c.l. same basis.	lb.	.14½-	—
Zinc oxide, French process, green seal, bgs., t.c.l., 10 tons or more, same basis	lb.	.15¼-	—
bgs. t.c.l. smaller lots, same basis	lb.	.15¾-	—
Zinc oxide, white seal, bgs., c.l., same basis	lb.	.14¾-	—
bgs., t.c.l., 10 tons or more, same basis	lb.	.15½-	—
bgs., t.c.l., smaller lots, same basis	lb.	.15¾-	—
Zinc oxide, USP dms., c.l., frt alld.	lb.	.16 -	—
dms., t.c.l., 10 tons or more, same basis	lb.	.16½-	—
dms., t.c.l., smaller lots, same basis	lb.	.17 -	—
Zinc phenolsulfonate, NF gran., dms	lb.	.45	46
NF powd. dms	lb	48	49
Zinc resinate precip 7.2-7.6% Zn. dms., frt. alld	lb.	.45 -	—
Zinc silicofluoride dms works	lb	12½	14
Zinc stearate USP ctns. c.l.	lb.	.41 -	—
	lb	41	—
ctns t.c.l.	lb	42	.46
Zinc sulfate powd., monohydrate, 36% Zn bgs. c.l. dlvd. E 100 lbs		8.75	—
bgs. t.c.l. dlvd E 100 lbs		9.75	—
Zinc sulfate in bbls 40c higher			
Zinc sulfide pure bgs c.l. dlvd	lb	.2530-	—
Zinc undecylenate 75-lb fib dms., f.o.b works	lb	2.04	—
Zinc, yellow (see Zinc chromate			
Zinc-ammonium chloride bgs c.l. works 100 lbs		10.25 -	—
bbls. c.l., works 100 lbs.		10.85 -	—
bbls. t.c.l. works 100 lbs		11.35 -	—
Zinc-formaldehyde sulfoxylate, basic 300-lb dms., frt alld	lb	26 -	—
Normal, 250-lb dms., frt alld	lb.	.55 -	—
Zircon (G) gran bgs c.l works	lb	03⅛	—
Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03⅜-	—
bgs. 1 ton to 9,999-lb lots, works	lb.	.04	—
bgs., smaller lots, works	lb.	06½	—
Zircon (G) milled bgs. c.l works	lb.	.04⅛	—
bgs. 5 tons to c.l. works	lb	04⅜	—
bgs. 1 ton to 9,999-lb lots, works	lb.	.04⅜	—
bgs. 500-1,999-lb lots, works	lb.	.07½-	—
Zircon (G) in barrels 1c higher			
Zirconium acetate soln 13% ZrO_2, dms c.l. 30,000 lbs min., works	lb	23	—
Zirconium hydride powd electronic grade dms. works	lb.	14.00	-15.00
Zirconium oxide, CP, white grd., bbls or bgs. works	lb	1.50	—
Electric-fused lump bgs 500 to 1,999-lb lots works	lb.	48½-	—
bgs., smaller lots works	lb.	.51	—
milled bgs. c.l. works	lb.	.62	—
bgs., 5-ton lots, works	lb.	.62½-	—
bgs., 1-ton to 9,999-lb lots, works	lb.	.63½-	—
bgs. 500 to 1,999-lb lots, works	lb.	.64	—
bgs. smaller lots works	lb.	.66	—
Glass polishing grade 94-97% ZrO_2, bgs. works	lb.	.55	.65
Opacifier grade 85-90% ZrO_2, bgs.,	lb.	.27	.50
Stabilized oxide 91% ZrO_2 milled, bgs	lb.	.62	.85
Zirconium oxychloride, cryst. ctns., 5-ton lots works	lb	37½	—

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Petroleum Derivatives

Export prices for all grades of white mineral oils were increased a minimum of five cents a gallon effective March 1, it was announced last week by a major producer. Export prices for petrolatums were also increased a minimum of one-half cent a pound. Higher costs of labor and raw materials are cited as the reasons for the increases. Domestic prices remain unchanged. Strong market positions for aromatic solvents features the petroleum derivatives despite fractional weakening of demand from some areas. Calls for BTX for solvent purposes remains curtailed as auto, appliance and other metal finishing industries are operating at subnormal rates of production. Styrene demand, which has been gradually declining since September, took a fifteen percent drop in January on the basis of cutbacks in synthetic rubber due to the auto slowdowns.

Result was that last week major styrene makers cut the tankcar price of technical grade styrene to eleven cents a pound, copolymer grade to thirteen cents and changed delivery terms to a freight equalized basis. Effective date was March 1.

Of interest to benzene producers is the basis for escalation. Under the new terms, styrene quotation will be based on a petroleum benzene range of thirty-one to thirty-four cents a gallon, instead of the former thirty-four cents, meaning that any future downward drift in benzene will not weaken styrene price structure unless benzene drops below thirty-one cents.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 4, 1950
103.74	103.74	103.74	103.64

For Current Prices See Page 11

Aromatic Solvents

Benzene—In the February 20th market report it was indicated in this column that production at "Hydeal" plants had been at less than satisfactory levels. Further checking with "Hydeal" sources reveals that there is only one small unit down occasionally, and that all other plants on stream are operating satisfactorily at virtually peak output.

In the current market petroleum producers continue to report heavy demand on the part of most consumers.

Strong pressure is being exerted by buyers in attempts to corral material.

One trade source reveals he received a request from a Canadian consumer which was filled by shipping ten tankcars from Texas to the Canadian receiving point at a considerable freight cost.

Despite the high shipping cost the consumer was quite pleased at getting the benzene, the producer says.

One area of the market has shown signs of easing off and that is in styrene demand. Benzene producers via petroleum and cokeovens agree that there has been a fractional decline in styrene demand.

One source's opinion is that decline in end-use of styrene has finally backed up to the benzene makers.

Result was that last week a Pittsburgh-based styrene maker cut price to 11c. a pound, freight equalized, and revised the escalation clause to be based on a price spread for benzene of 31c. to 34c. a gallon.

Petroleum processors turned out 29,730,622 gallons of benzene in December, industry high for the year. Total from all sources was 38,182,412 gallons with cokeoven sources contributing the balance of 8,451,790 gallons.

Unofficial 1960 total production is placed at 452.3 million gallons.

Petroleum producers continued their hegemony of the market by churning out 307 million gallons of benzene in 1960, as compared with 134 million gallons for cokeovens and 11 million gallons for tar distillers.

Toluene—Sources report calls for toluene remain active.

Petroleum and cokeoven producers are competitively priced although one petroleum source hints at instituting a higher price.

Petroleum producers continue to dominate the market with approximately 90 percent of available supply coming from oil.

Cokeoven sources are able to remain competitive in some areas, however, the result being toluene is moving at one price in most areas regardless of origin.

Toluene production hit 27,343,454 gallons in December, up 1.7 million gallons from November output.

Petroleum processors turned out 25,182,252 gallons, up 1.5 million from November, and cokeoven operators produced 2,161,202 gallons.

Unofficial total for 1960 is placed at 279,077,826 gallons, up 37.4 million gallons from 1959.

Xylene — Interest in xylene remains centered in the fractions with para and orthoxylene demand reported strong and growing.

Calls for xylene for use as a solvent, however, is down on the basis of reduced auto, appliance and affiliated metal finishing industries.

Advent of petroleum naphthalene plants—the first came on stream two weeks ago—may tend to blunt the use of orthoxylene in phthalic anhydride production, however.

Phthalic anhydride producers by and large prefer naphthalene for starting material but the shortage of naphthalene over the past few years has caused some PA makers to bring in orthoxylene to keep production going.

Yields from ortho are said to be less than that from naphthalene, however, and some purity problems are reported.

With domestic US naphthalene supply expected to score big gains this year from petroleum sources it would appear that ortho demand will not advance as rapidly as it has during the current naphthalene shortage.

Possible avenue of expansion for ortho lies in export markets. Italy particularly appears to be a growing market for orthoxylene judging from the ambitious plans of US refiners to build plants here, and in Italy, to supply that country's burgeoning chemical needs.

Xylene production in December was 28,397,557 gallons, up some 230,000 gallons from November.

Petroleum producers and tar distillers turned out 27,868,295 gallons, up 300,000 gallons from November.

Cokeoven sources produced 529,262 gallons, a decline of some 70,000 gallons from November.

Unofficial total output for 1960 was 322,002,619 gallons, up 95.5 million gallons from 1959 totals.

LPG's

A recently completed study of Chicago's bus fleet reveals that lpg-fueled buses are operating at lower costs than diesel-fueled buses in the same system.

In use for eleven years in the windy city's public transportation system the lpg-fueled buses have been proven to operate at two to three cents less a mile than diesel-fueled buses.

Basis of comparison included original cost of equipment, maintenance, fuel and storage.

Other factors bearing heavily in favor of lpg-buses are partial elimination of exhaust fumes and lower level of noise.

To noise and air pollution conscious city planners these latter benefits are of as much interest as the realized financial savings.

Crude Oil Stocks

Domestic and foreign crude petroleum stocks at the close of the week ended Feb. 18 were 1,677,000 bbls. lower than at the end of the preceding week.

Week ended Feb. 18—230,554,000 bbls.

Preceding week—232,221,000 bbls.

This decrease comprises a decrease of 685,000 bbls. in stock of domestic crude and a decrease of 992,000 bbls. of foreign crude.

(Source: Bureau of Mines)

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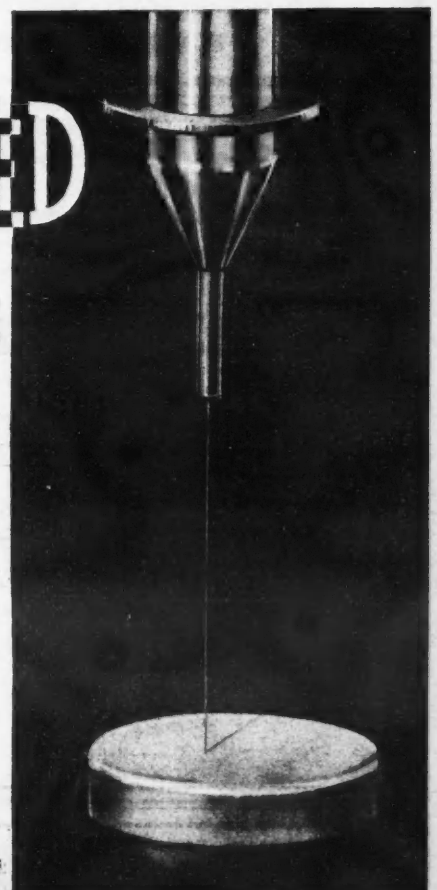

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Agricultural Chemicals

The mid-west continues to be the major center of marketing activity in the fertilizer market. There, both ammonium sulfate and urea have run into special situations that are attracting interest in this pre-fertilizer season period. The problems the two fertilizer materials have encountered are not related except for their geographical location, and the fact that the repercussions have overflowed to other marketing areas.

A few weeks ago the listings for agriculture grade urea were reduced $4 to $8 per ton in an effort to capture some of the formulators nitrogen business. Despite this reduction, the situation for urea is reported to be still on the competitive side.

Ammonium sulfate however, is running into a different sort of a problem. Supplies of ammonium sulfate are not keeping up with the increased demand. At first confined to the mid-west, the tightness in supplies is reported to have spread to other areas as the market enters the pre-fertilizer season. Listings, despite the pressure exerted by the tight market, remain unchanged.

The fishmeal market is reported to be holding in the same listless position it has held over the past few months. Listings here are reported in the range of $92 to $95 per ton, for bagged meal on both Atlantic and Gulf coasts.

A major chemical producer has developed a new insecticide that is reported to be effective against flea and ticks on dogs and cats. Control of these pests has become more difficult due to the pests increased resistance to commonly-used insecticides.

Described as a carbamate, the newly developed insecticide is specially formulated for household pets and is reported to have no harmful effects on household pets as well as to the people applying them.

Canada's first basic pesticide plant will be constructed this Spring in the Saskatoon area, reports one of the Canadian cooperatives. The new plant is to be part of a multi-million dollar chemical complex consisting of a caustic-chlorine unit, a basic agricultural chemical processing plant and a chemical formulating plant. Trade estimates indicate that the new plant will be capable of meeting much of Western Canada's demand for herbicides.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 5, 1960
111.00	111.00	110.71	110.95

For Current Prices see Page 10

Animal and Plant Foods

Animal Proteins—The long-awaited improvement in the animal feeds market failed to make an appearance last week. Listings for such items as fishmeal and scrap continued to be quoted in the same ranges as in previous weeks. Meal is presently listed at $92 to $95 per ton for bagged material on both Atlantic and Gulf coasts.

The difficulties involved in the fishmeal market extend into Japanese waters, reports the US Department of the Interior. The Japanese Fishery Association is actively promoting the establishment of an organization to represent that nation's fishmeal manufacturers.

Now in existence is the group called the Japan Fishmeal-Fish Oil Association, located in Hokakaido.

Last December, Japan's second conference for adjusting the supply and demand of fishmeal ended without reaching an agreement. Representatives of the Fishery Agency, meal producers and users discussed problems of their country's meal production and use of fishmeal and of the problem of fishmeal imported from Peru.

According to US sources, however, the meeting ended in a deadlock as producers and consumers held divergent views.

Regional organizations are reported to be concentrating on control of production and exchanging information rather than engaging in joint marketing ventures or other economic projects.

The Department of the Interior said the problem of Japanese imports of Peruvian fishmeal had not been resolved between the Fishery Agency and livestock people but that the Fishery Agency is hopeful in reaching an amicable settlement through the establishment of an association that would be the chief spokesman in all marketing negotiations.

Ammonium Sulfate—As the fertilizer season draws closer, trade sources report that demand for ammonium sulfate is on the upswing. The supplies of ammonium sulfate, however, have not kept pace with the improvement in demand due to the reduced output from steel's cokeovens. Should this trend continue: increased demand, tight supplies, the situation in the next few months might prove to be a very difficult one for producers. In spite of the tightening market outlook, trade sources report that the listings for ammonium sulfate continue to be quoted in the same range established at the beginning of the 1960 fertilizer season.

Urea—Despite the $4 to $8 per ton reduction posted on listings for agriculture grade urea, the competitive nature of the market persists. The price had been made as an attempt to capture some of the fertilizer formulators' business a few weeks ago, but the sources of the trouble, the Mid-West, continues to be the major battleground for the urea market.

Production of urea (on the basis of total primary production) as reported by the Tariff Commission, was set at 100,945,900 pounds in December, 1960, as compared to 100,456,147 pounds in the previous month.

Pesticides Output

Following are production statistics reported by the Tariff Commission representing the number of pounds of certain pesticides produced during December, 1960, with November's production figures supplied for comparison:

	November	December
DDT	14,283,090	14,187,370
2,4-D*	*2,991,851	*3,505,859
Ester & Salts	*2,396,982	*2,971,649
Acid equivalent	*1,786,292	*2,033,796
BHC	2,534,095	2,433,098
Gamma isomer	871,037	791,451
2,4,5-T	—	—

* Partly estimated.

Pesticides

Production of the acylic pesticides and other acylic organic agricultural chemicals in 1960 amounted to 120 million pounds, compared to 117 million pounds reported for 1959. Sales in 1960 were 112 million pounds, valued at $57 million compared to 93 million pounds, valued at $53 million in 1959.

US Production and Sales of Pesticides in 1960 as reported by the Tariff Commission:

Pesticide	Production (1,000 lbs.)	Sales ($1,000)
Fungicides, total	86,794	$71,107
Naphthenic acid, copper salt	1,893	1,851
Pentachlorophenol	39,336	31,613
2,4,5 Trichlorophenol and salts	10,021	2,702
All other	35,544	34,941
Herbicides, total	101,356	62,545
Phenoxyacetic acid and derivatives:		
Acetic acid ester (2,4,D)	36,185	———
Esters and salts, total	34,031	30,118
N-butyl ester	8,265	8,245
Dimethylamine salt	5,000	5,035
Iso-octyl ester	2,746	2,549
Isopropyl ester	4,354	3,540
All other	13,666	10,749
All other herbicides	39,064	36,597
Insecticides and rotenticides, total	329,102	312,031
Chlorintaed insecticides, total	304,106	289,586
Benzene hexachloride and lindane	37,444	30,646
DDT	163,582	158,533
All other	103,080	100,389
Methyl parathion	11,794	10,262
Parathion	7,448	7,532
All other	5,745	4,651
Fungicides and soil fumigants, total	85,576	79,954
Methyl bromide	11,264	10,713
All other	74,312	69,241

Malathion—The US Department of Agriculture has accepted the use of 4 percent malathion dust for the control of lice, ticks and keds on sheep and goats. Malthion has previously been accepted as a 57 percent emulsible liquid in controlling these pests, according to reports from the producer.

The new use allows applications to be made in dust form directly to the backs and necks of certain animals. Repeat applications can be made after two or three weeks if needed.

Flame Retardant Producers Accent Durable Over Non-Durable Types

Makers of flame retardants for the textile industry, like producers of most finishing agents, want to accent the durable and eliminate the non-durable. Flame retardants are currently available which are durable to extended dry cleaning and mild washing. However, these are subject to gradual weakening on successive washings until flame resistance falls below the critical point. This is one strong argument for the use of non-durables, sources say. They point out that renewing flame resistance each time the fabric is washed insures continuous high level protection.

Price, too, is a point against the permanent type of flame proofing agent (60-70 cents a pound as against 20-50 cents a pound for non-durable types). The renewables are also generally water soluble, which means they can be extracted and recycled for use again and again—a further cost-cutting consideration.

Basically, products used in the textile industry have not changed, but producers have continued their efforts to produce flame retardant products which would incorporate other desirable textile finishing properties at the same time.

Gov't Specs Call For Flame Proofing

The treatment of textile materials was first given impetus during World War II, when government specifications called for flame proofing a wide variety of different materials.

Considerable volume continues to move to armed forces outlets. However, development of a civilian market for flame-proof awnings and decorative draperies has been slow and is not expected to increase appreciably.

In the plastics industry, a trend continues toward development of organic compounds designed to impart internal fire-retardant properties to plastics. Phosphate plasticizers containing some antimony oxide provide good flame resistance for most polymers.

As epoxy resins have moved into the 60-70-million-pound class, efforts to incorporate flame retardance in them have been intensified. The fact that epoxies burn readily has been a drawback in applications such as laminates for electrical uses.

Monsanto Chemical Company, St. Louis, Mo., manufacturers "Aroclor" chlorinated polyphenyls for use with epoxies. For example, the company points out that solid "Aroclor 5460" may be used in the amount of fifteen parts per hundred of resin, along with five parts PHR of antimony oxide to produce a non-burning composition.

The "Aroclors" are available as a series of liquids and solids that range from water-white mobile oils and clear, viscous resins, to pale yellow solids. Monsanto reports price is in the 16c. to 19c. per pound range for carload quantities.

Antimony Oxide Also Used

The company reports the non-burning benefit of adding "Aroclor" and antimony oxide should prove particularly advantageous in laminates for printed circuits and other electrical uses.

Last year, Monsanto came up with six organopolyphosphorus compounds called "Phosgards." The products are derived from a chemical reaction discovered by Dr. Gail H. Byrum, a Monsanto scientist.

The company hopes that these products will afford a practical and economic means of giving flame-retardant qualities to a wide variety of plastics, synthetic fibers and wood products.

The materials combine high halogen and phosphorus content with good compatibility in a wide range of polymeric systems. Monsanto reports the "Phosgards" have best compatibility with polymers that are of poor crystalline structure and are polar. This would include phenolics, polyesters, urea-formaldehyde and polyvinyl acetate resins, among others.

Compatibility is poorest with polyethylene, polypropylene and nylon, while medium compatibility is reported for polystyrene, polyvinyl chloride and polyacrylonitrile systems.

Bromine-phosphorus flame retardants, such as "Phosgard B-52-R," have been found highly effective. However, the problem of compatibility in resin systems has held back developments in this area.

Michigan Chemical Corporation, St. Louis, Mich., markets the "Firemaster" compounds as fire retardants for plastics. "Firemaster T23P," tris (2,3-dibromopropyl) phosphate, is offered in commercial volume and has found use in expanded polystyrene.

The compound has also been evaluated for use in polyesters, polyurethanes and epoxies as well as other plastics systems. Another "Firemaster" product, "BP4A," tetrabromobisphenol-A, has begun to move in fair volume, according to the company. Michigan Chemical dropped the price of "BP4A" last September from 90c. to 65c. a pound in commercial quantities.

Chlorinated Paraffins Effective

Chlorinated paraffins are manufactured as fire retardants under the "Chlorowax" trade name by Diamond Alkali Company, Cleveland, Ohio. "Chlorowax-40" and "50" are two representative products of this type, the numeral referring to percent of chlorination.

These products are liquids, but a few resinous products are offered ("Chlorowax-70"). Beyond 50 percent chlorination there are problems with stability.

Diamond Alkali recommends "Chlorowaxes" as flame proofing for polyester laminated boats. The materials are well established having been used extensively by the Navy during World War II.

American Cyanamid Company, New York, markets flame-proofing compounds under the "Pyroset' 'and "Aerotex" trade names. The company has three products for cotton and several for nylon in the textile field.

"Pyroset DO" is termed a durable organic phosphate-type flame-proofing compound for use on cotton. Cyanamid's "Pyroset N-2" (modified urea-formaldehyde copolymer) and "N-10" (modified urea-formaldehyde copolymer condensate) are durable flame retardants and stiffeners for nylon.

Non-Durables For Cotton Offered

"Aerotex NDC" and "NDS" are non-durable water-soluble products for use on cotton and are similar in composition. The "NDS" can be sprayed as well as padded on.

E. I. duPont de Nemours & Co., Wilmington, Del., manufactures ammonium salt-type flame retardants for use in textile and paper applications. Flame retardants "CM" and "X-12" are renewable types for application to cellulosics.

The "CM" is based on ammonium sulfamate, also sold by duPont as a flame retardant, and is specially modified to prevent afterglow and improve penetration.

Metal & Thermit Corporation, Rahway, N.J., has long been a major producer of antimony chemicals for both ceramic ap-

—Continued on page 60

Cotton Flame-Proofer Discovered by USDA

Department of Agriculture has what it thinks is the answer to the difficult problem of flame-proofing cotton fabric.

Researchers at USDA's Southern Regional Research Laboratory have come up with a flame retardant based on a new thermosetting resin made by reacting two phosphorus-containing compounds.

The two compounds—tris-(1-aziridinyl) phosphine oxide ("APO") and tetrakis (hydroxymethyl)-phosphonium chloride ("THPC")—react to form an insoluble highly cross-linked condensation polymer.

"THPC" is commercially available from Hooker Chemical Corporation. According to USDA, six chemical companies have developed pilot-plant methods for production of "APO."

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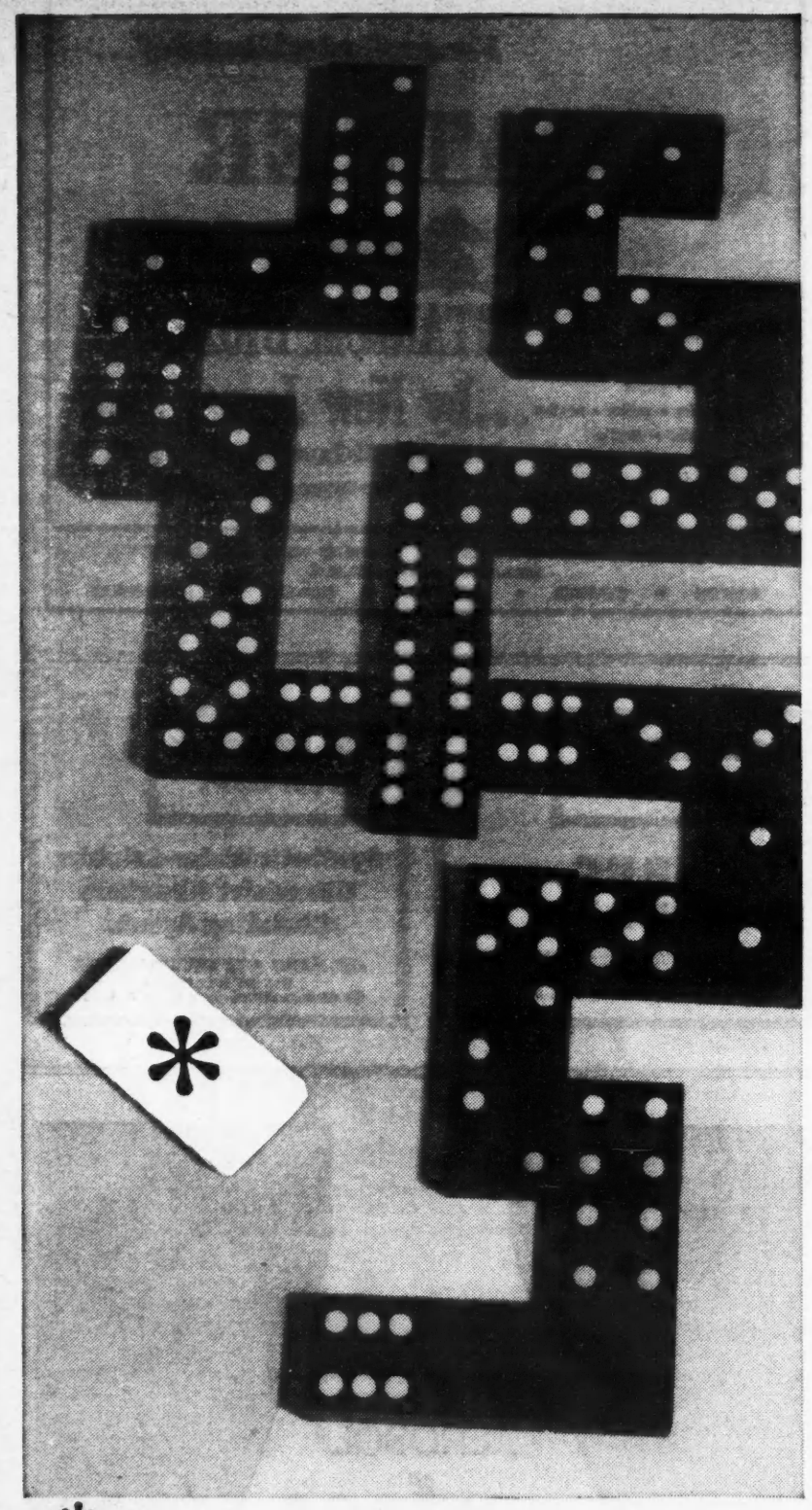

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KOPPERS COAL CHEMICALS

Coal Chemicals

Styrene monomer, technical grade, was reduced 1.59 cents a pound in tank-car quantities last week. Copolymer grade was reduced 1.50 cents a pound. Delivery terms for both products was changed to a freight equalized basis for volume shipments. Effective March 1 price of technical grade became 11 cents a pound and copolymer grade, 13 cents. Also introduced was an innovation in the escalation clause governing technical grade monomer. Under the new clause, to take effect April 1, styrene quotation will be based on a benzene price range of 31 to 34 cents a gallon, meaning that a fluctuation within these limits will have no price effect on styrene if the other factor, petroleum refining labor, remains unchanged.

Drum prices for technical grade monomer were also affected in the price change. Carlot amounts now sell for 15 cents a pound, delivered, and less than carlot amounts, 17 cents, same basis. The new terms do not subject drum prices to escalation changes.

Copolymer grade monomer drum prices are 17 cents for carlot amounts, delivered, and 19 cents, same basis, for less than carlot amounts.

Like March itself the price cut came in like a lion surprising trade observers with the depth of the cut, the new freight terms and the nature of the new escalation clause.

Reason for it all is held to be the slackening of demand for styrene in recent months. One source remarks that demand in January alone had dropped fifteen percent while a study of production figures in the last half of 1960 indicates a slow, steady decline in output from May's high of 152.1 million pounds to December's low of 130.8 million pounds.

At fault for the reduction in demand, trade observers say, are major cutbacks in auto production which have curtailed synthetic rubber business.

Tariff Commission report for December reveals most chemicals on the list scoring advances despite the low steel operating rate for that month.

Leading the gainers were—

Phenol—up 7.2 million pounds.

Phthalic anhydride—up 2.3 million pounds.

Naphthalene—up 2 million pounds.

Benzene—up 2 million gallons.

Monochlorobenzene—up 1.9 million pounds.

Declines were small with dodecylbenzene loss of 1.7 million pounds the widest decrease.

Preliminary year-end statistics for 1960 point up the giant strides made in production potential by cokeoven and petroleum chemical producers.

Among chemicals making major advances in 1960 over 1959 were—

Styrene monomer—up 184 million pounds.

Benzene—up 128 million gallons.

Xylene—up 95.5 million gallons.

Naphthalene—up 98.7 million pounds.

Phenol—up 78.5 million pounds.

Declining chemicals were held to narrow losses with dodecylbenzene's decrease of 17.6 million pounds by far the widest drop.

Production of steel for the week ended February 18 was 1,582,000 tons, the same figure recorded for the preceding week.

Based on assumed 1961 steel capacity, production for the week ended February 18 was 55.5 percent of capacity.

Price Trends

Advanced

None

Reduced

Styrene monomer, tech., 1.59c. per lb. copolymer grade, 1.50c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Mar. 5, 1960
117.51	117.52	117.46	118.40

For Current Prices see Page 10

Basic Products

Benzene—Production of benzene from all sources totaled 38.2 million gallons in December.

Despite the poor steel month cokeoven operators managed to turn out 8.5 million gallons, approximately the same amount as in November.

Petroleum processors boosted output to 29.7 million gallons, the oil industry high of the year.

Unofficial 1960 total production tallies at 452.3 million gallons from all sources.

Cokeoven share was approximately 134 million gallons while petroleum boomed ahead with 307 million gallons. Tar distillers' output was 11 million gallons.

Creosote—Government of the Sudan is seeking 1,000 metric tons of creosote, reports the Bureau of Foreign Commerce.

Bids are invited until March 23 by:

Controler of Stores.

Sudan Railways.

Khartoum, Republic of the Sudan.

Preliminary deposit of 2 percent of bid required.

Naphthalene—Supply remains critically tight, producers report.

Naphthalene production in December regained some lost ground as output climbed to 34.6 million pounds, an increase of 2.1 million pounds over November's total.

Unofficial total production for the year was 501.9 million pounds, as compared with 403.3 million pounds in 1959.

Intermediates

Maleic Anhydride—A major chemical producer based in Pittsburgh is the newest entrant in the MA field.

Coming on stream in late January with a 20-million-pound-a-year plant, the producer reports the unit is operating satisfactorily in all respects.

Some of the material is used captively in fumaric acid but substantial amounts of the new supply is available for sale, the maker says.

Phthalic Anhydride—Producers report they are still hampered by lack of naphthalene.

Petroleum naphthalene has started to flow to a few fortunate customers but the effects of this added material has not been felt by the market as a whole.

Trade sources predict it will be a half-year yet before the added naphthalene from newly-built petroleum and cokeoven

Aromatic Chemicals Output: December

Figures for benzene, xylene and toluene include cokeoven operators, tar distillers and petroleum operators Creosote oil statistics include distillate as such, and creosote content of solution, on 100%-creosote basis.

		December 1960	December 1959	Total 1960*	Total 1959
Aniline	lbs.	8,927,809	10,948,086	120,434,775	122,455,052
Benzene	gals.	38,182,412	38,001,899	452,258,803	324,276,224
Creosote, oil	gals.	6,919,173	9,087,990	87,840,643	89,116,321
Cresols, m-p and o-m-p fractions	lbs.	4,697,147	3,179,195	49,092,798	33,440,024
Cresylic acid, refined all sources	lbs.	4,632,719	5,617,223	57,388,734	59,609,835
Dodecylbenzene	lbs.	38,981,584	45,114,087	474,385,340	491,968,860
Monochlorobenzene	lbs.	47,897,893	45,391,887	590,980,569	539,285,780
Naphthalene, crude	lbs.	34,574,513	41,775,605	501,899,467	403,252,525
Phenol, tech. and USP	lbs.	71,067,964**	69,065,847	753,604,148	675,103,267
Phthalic anhydride	lbs.	28,849,537	26,482,715	374,816,413	345,340,874
Styrene monomer	lbs.	130,835,284	151,821,386	1,642,374,894	1,458,950,838
Toluene	gals.	27,343,454	18,921,750	279,077,826	241,567,681
Xylene	gals.	28,397,557	21,907,321	322,002,619	226,535,517

Source: Tariff Commission.
** Partly estimated.
* Preliminary.

Coal Chemicals

sources will ease the tight supply position of PA.

One supplier who has been allocating PA reveals that his plant is 30 percent shut down in order to expand his PA production line.

Styrene Monomer — Technical grade monomer was cut 1.59c. a pound in tankcar quantities last week. Copolymer grade was reduced 1.50c. a pound in tankcar amounts.

Delivery terms for tankcar amounts were changed to freight equalized from the former freight allowed basis.

Effective March 1 technical grade monomer in tankcars became 11c. a pound and copolymer grade, 13c.

Drum prices for technical grade are now—carlots, 15c. a pound, delivered, less than carlot amounts, 17c., same basis.

Copolymer grade drum prices became 17c. for carlot amounts, delivered, and 19c., same basis, for less than carlot amounts.

A new wrinkle in pricing was introduced in the escalation clause at the same time.

Beginning April 1 the escalation clause, which governs SM price on the basis of benzene price and refinery labor costs, will be based on a petroleum benzene price spread of 31c. to 34c. a gallon. Former terms were escalated on the basis of 34c. a gallon benzene.

In effect, basing the escalation clause on a benzene price spread serves to protect the SM producer against a decline in SM price in the event of a future benzene decrease unless the level falls below 31c., which is unlikely.

Reason for the SM price cut at this time trade sources opine is that styrene demand took a 15 percent drop in January. Blamed is the cutback in auto production which has curtailed synthetic rubber activity.

Although no production figures are available for January yet, a glance at SM output in the last half of 1960 shows a steady decline in production.

The year's high was reached in May when 152.1 million pounds was turned out. From that month until December, with the exception of August, each month's production was less than the month preceding it.

The decline was steady, about 3 to 4 million pounds a month, until December output was officially placed at 130,835,284 pounds, lowest for the year.

Coal Chemicals*

Estimated output of coal chemicals recovered from cokeoven operations during the week ended February 25, were as follows:

Ammonia liquod	lbs.	498,690
Ammonium sulfate	lbs.	20,972,685
Benzene	gals.	2,022,465
Coaltar	gals.	11,054,295
Crude chemical oil	gals.	322,925
Solvent naphtha	gals.	64,645
Toluene	gals.	452,515
Xylene	gals.	129,290

* Based temporarily on 1960 theoretical capacity.

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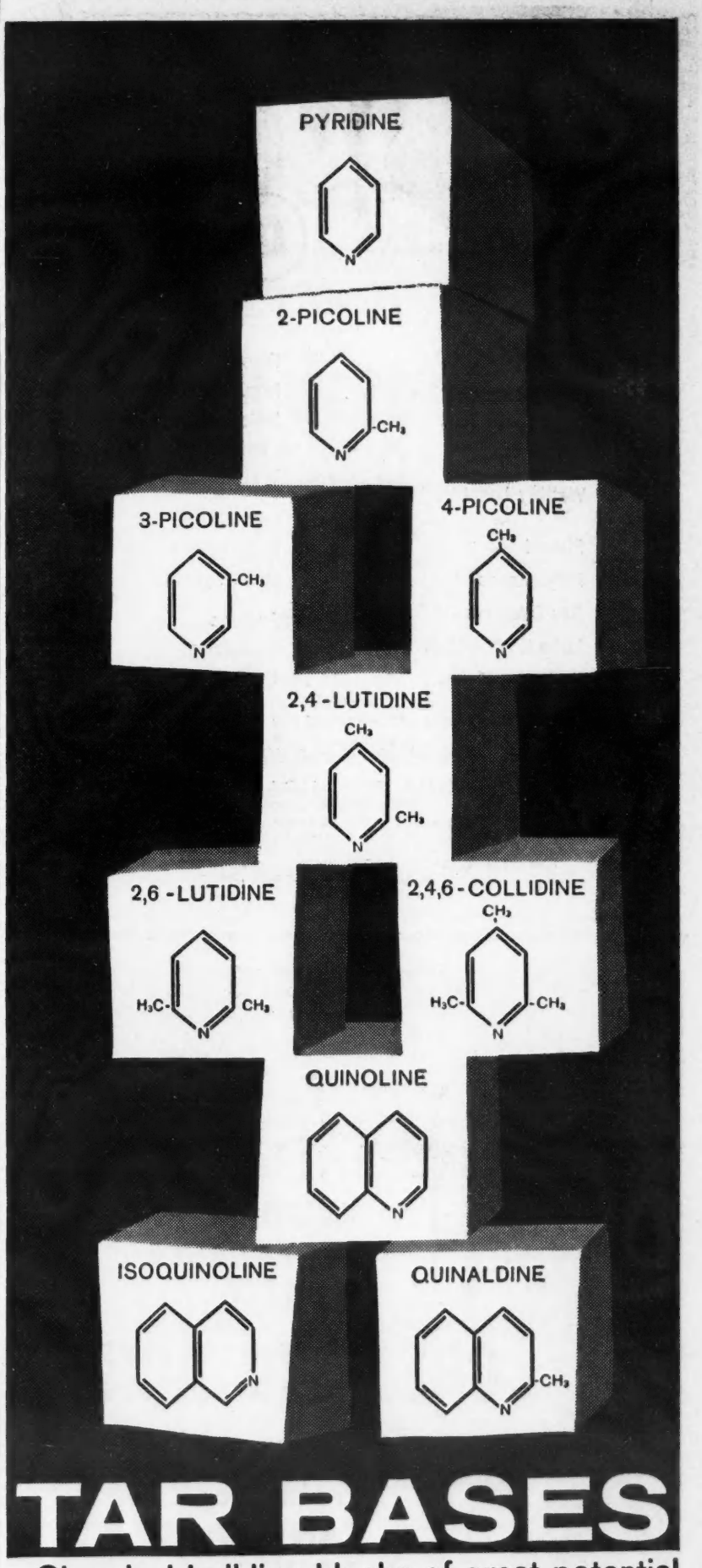

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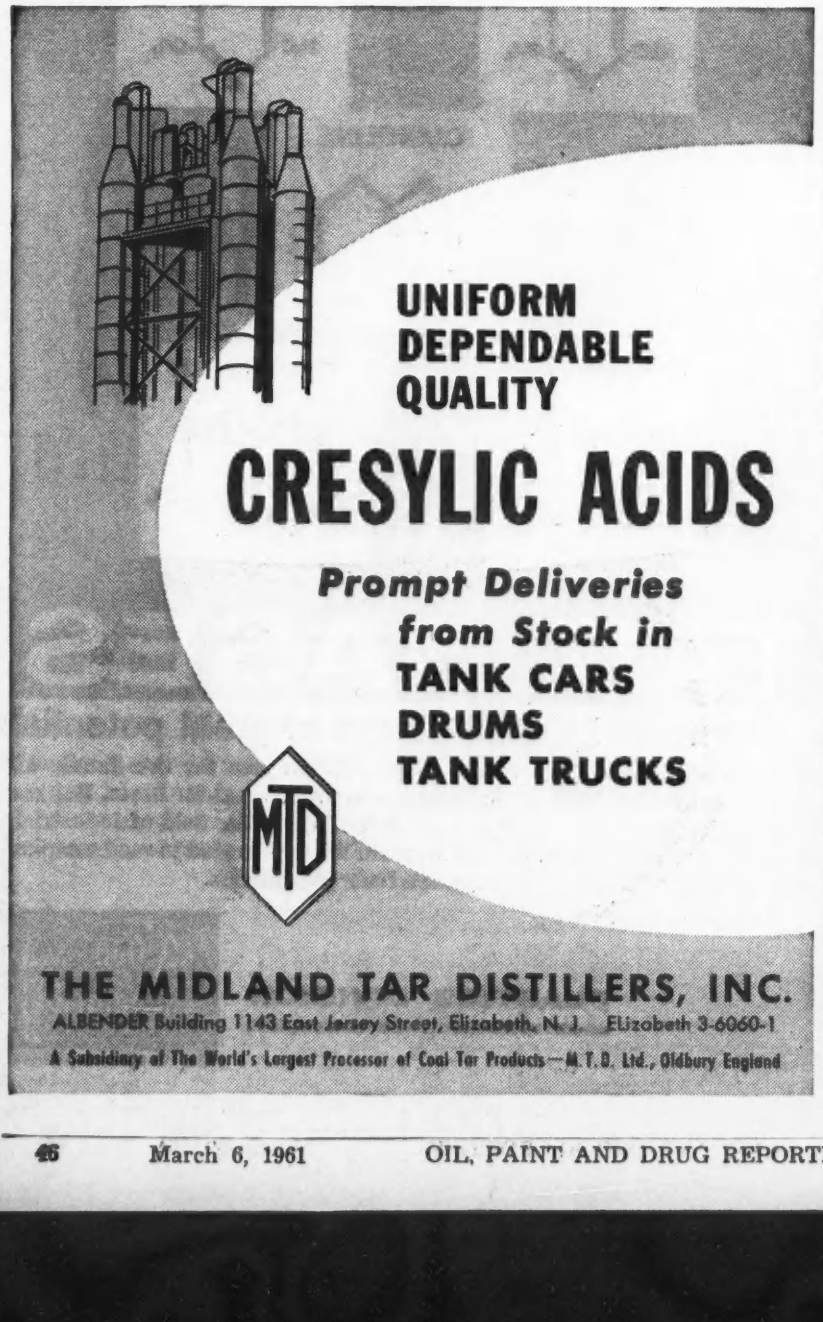

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Additives Poser: After HR 3980, What?

—Continued from page 3

how the law would be applied in the case of a material not now considered to be a food additive, but which later is found to be within reach of the law because of becoming a part of the food product through migration.

Industry fears the consequences of discovering overnight that a product it thinks to be outside the law may suddenly confront it with the problem of meeting all the law's requirements of tests for safety.

Mr. Larrick was extremely doubtful that any such situations would arise and inferred that if they did, the FDA would move to remove the product from the market promptly only in those cases where it was evident that the product was dangerous to health.

He said that "discretion" would be used in such instances and when asked to pinpoint his authority to exercise "administrative discretion" in enforcing the law, gave the following response:

Local Backing for Discretionary Powers

"The department is not bound to proceed immediately against every adulterated article. The Supreme Court, in United States v Sullivan, 332 U. S. 689, has made it clear that the department has been given broad discretion, 'broad enough undoubtedly to enable (the commissioner) to perform his duties fairly without wasting his efforts on what may be no more than technical infractions of the law.' And the court said that the scope of the law should not be narrowed by 'envisioning extreme possible applications of its provisions.'

"More recently the court, in an opinion by Chief Justice Warren in Rathburn v United States, 355 US 107, 109, has said: 'Every statute must be interpreted in the light of reason and common understanding to reach the results intended by the legislature.'

"Applying this rule of reason, and exercising the discretion referred to by the Supreme Court," Mr. Larrick continued, "the department would be able to cope with the situation in which a long used substance, either on the generally recognized as safe list or the subject of a prior sanction, is thrown into question under the food additives amendment.

"If the question arose simply because it was learned that some substance of unknown identity migrated from paperboard, the department would not be compelled to immediately initiate a seizure campaign against all paperboard packaged food.

"But if it was learned that the migrant was one about which there was a serious question of safety, or one of unknown toxicy, the department should have the authority to proceed in the public interest. This kind of action is permitted by the permanent provisions of the act."

Chemstrand of England Sets Acrylic Fiber Capacity Boost

Chemstrand, Ltd., London, will get under way immediately on a 50 percent expansion of production facilities for its acrylic fiber, "Acrilan." This first phase of a broad expansion program will carry the company's capacity to 15 million pounds a year. Completion is scheduled for mid-autumn.

Engineering work has been started to increase acrylic capacity to 25 million pounds a year by the end of 1962, the company reports. An additional ninety-eight acres of land adjoining the present factory site at Coleraine, Northern Ireland, are being purchased.

Ethyl in Catalyst Pact

Ethyl Corporation has signed an agreement with Catalysts & Chemicals, Inc., Louisville, Ky., to cooperate in the research, development and testing of catalysts for the use in catalytic converters for automobile exhaust gas. Ethyl, which has conducted extensive research in this field for several years, says the work will be aimed at development of a commercially practical catalyst.

Sulfur Industry at Sea

—Continued from page 5

ing operated by Joshua Hendy Corporation, contains five tanks which are equipped with steam-heated coils to maintain the molten sulphur at the required temperature.

The new marine equipment and terminal facilities, which will ultimately cost an estimated $20 million, are being financed by independent marine transportation and terminal companies.

The facilities are owned by these companies and will be operated under contracts with Freeport. Additional facilities necessary for the program are being installed by Freeport, principally at Port Sulphur, at a cost of between $3 million and $4 million.

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Drugs, Fine Chemicals

In general the drug and fine chemical business is slowing down. This is partly due to the overall decline in general business volume during January and February, but in the case of drugs is also due to the usual seasonal decline that sets in about now and continues as warm weather approaches. Cold tablets and cough remedies which are in heavy demand during the colder weather always ease off with the coming of spring and cuts down demand for everything from cocillana to antihistamines. Even analgesics like aspirin and the APC tablets drop in usage during summer months.

The passage of the Carston bill by the Federal government made the opium derivative noscapine, regarded as a non-narcotic, and it can now be sold in "over the counter" preparations. It is an effective antitussive, and its price reduction last week makes it one of the least expensive.

The General Services Administration has just sold 1,070 ounces of hyoscine from the national stockpile at $11 per ounce. Caffeine demand which is now experiencing a seasonal decline in drug demand is very soon expected to feel a spurt seasonally upward. This will be due to a sizable demand from the beverage trade for soft drinks. Citric acid sales to the beverage trade will also soon be due for a rise, which will more than offset sales declines that seasonally may drop in drugs and in powdered high vitamin orange drink products. Quinine salts which have been limping along in demand are expected to feel a push from demand for use in the gin and tonic type of alcoholic beverages popular in warm weather.

Acetophenetidin—Bulk demand from drug companies is slowing down seasonally because of lessened demand ahead during the warm weather for cold tablets and capsules and for APC tablet output.

Aspirin—Demand is beginning its seasonal slowdown. Inventories and products on hand are about enough to take care of the remaining heavy seasonal needs of pharmaceutical firms, and buying of bulk aspirin is accordingly showing its Spring curtailment. Price patterns in effect over recent weeks are expected to hold firm for the months ahead.

Caffeine—The seasonal pick-up in sales of this material, because of the demands for the beverage trade, has not quite yet gotten under way. However, it is expected soon. No price changes seem to be on the horizon. Drug demand for caffeine in APC pills and cold remedies is beginning to slow up seasonally, as is expected.

Citric Acid—Demand is said to be well sustained and very soon is expected to show an increase because of demands from the soft drink and beverage trade. Some falling off of demand for pharmaceutical use is seasonally expected, and for use such as in high vitamin orange instant drinks is expected to decline in the warmer weather.

Codliver Oil—This market is well sustained, remaining very stable, and prices unchanged for drum quantities at $1.40 to $1.70 per gallon, depending upon the potency.

Mercurials—Mercury salts are maintaining a stable market, with prices unchanged from levels which have prevailed over recent weeks. Supplies are quite adequate to meet demand.

Noscapine—Since the Federal government passed the Carston bill, this opium derivative which is a quite effective antitussive, is regarded as non-narcotic, and it can now be sold in over the counter-preparations. The price of noscapine has just been reduced from $10 an ounce to $8 per ounce, making it now the lowest cost antitussive on the market.

Price Trends

Advanced

Piperazine citrate, 18c. per lb.
Dihydrochloride, 6c. per lb.
Hexahydrate, 4c. per lb.
Phosphate, 5c. per lb.

Reduced

None

Comparative Price Indexes
(100—1949 average)

[illegible] week	[illegible] week	Last month	Mar. 5, 1960
59.28	59.27	59.27	60.35

For Current Prices see Page 10

Piperazine Salts—Prices advanced variously on different salts effective March 1, according to an announcement of some producers. The new schedule lists 1,000 pound lots of adipate at $1.33 per pound; citrate at $1.33 per pound; dihydrochloride at $1.29 per pound; hexahydrate at 90 cents per pound; and phosphate at $1.11 per pound. Solutions were also advanced.

Sodium Hydroxide—Pellets in quantities of ten 100-lb. polyethylene lined fiber drums are firmly priced at 26 cents per pound for the USP grade and 35 cents per pound for the ACS specification grade. Purified flakes in 400 pound steel drums for nitrogen determinations are priced at 14 cents per pound.

Sodium Tetraphenylboron—This reagent powder was advanced in price, bringing the new schedule at the consumer level to $72 per ¼ pound package.

Strontium Nitrate—The highly purified grade for use in the electronics industry as the anhydrous powder is currently listed at 25 cents per pound packaged in 400 pound polyethylene lined fiber drums. The commercial grade, packaged in bags moves in carlot quantities at 11 cents per pound.

Vitamin A—The market on the various forms and esters of vitamin A is just about like it had been. There has been no change in recent weeks from long established price schedules. Supplies are abundant and production capacity more than ample to take care of world needs. Demand has been well sustained, and any change in the weeks ahead as warm weather approaches, is not expected to be more than seasonal.

Botanicals

Imports detained by the Food & Drug Administration at the Port of New York during the two week period ended February 10 included 4 lots (93 bags) of gum karaya and 4 lots (136 crates) of papain.

Agar Agar—Spot market is very strong with USP Kobe No. 1 quoted at $3 to $3.10 a pound. Just established, this price reflects a short crop and resulting higher replacement costs.

Quote on the powder is $2.40 to $2.60 a pound; the high of the range is a new figure.

Copaiba Balsam—Demand is reported steady but there's been no price change. Quote remains at 80c. to 90c. a pound.

Dandelion Root—There's a fair amount of interest in this item, according to trade

—Continued on page 49

Drugs and Fine Chemicals Output: December

Following statistics for selected fine chemicals and drugs were compiled by the Tariff Commission. Figures relate to the production of bulk material only.

		November	December
Acetylsalicylic acid	lbs.	2,022,033	*1,887,447
Ascorbic acid and salts	lbs.	—	502,726
Dihydrostreptomycin	gms.	—	—
Niacin and amide	lbs.	149,173	127,880
Penicillin salts	million-units	54,575,342	50,171,577
Phenobarbital	lbs.	15,720	—
Pyridoxine	los.	5,621	—
Streptomycin	gms.	24,322,692	26,612,382
Sulfa drugs	lbs.	382,259	386,046
Tetracycline	gms.	—	11,446,060
Thiamin derivatives	lbs.	31,761	—

A dash (—) indicates data not reported.
* Partly estimated.

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AGAR—25 bls, T M Duche & Sons, Kobe
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ALUMINUM SULFATE—280 bgs, Bremen
AMBRETTE SEED—100 bgs, Marcel Calvet, Guayaquil
m-AMINOPHENOL—37 dms, Wilson Export & Import Corp, Kobe
AMMONIA SYNTHESIS CATALYST—69 dms, Solar Nitrogen Chemicals Ltd, Gothenburg
AMMONIUM CHLORIDE—200 bgs, Chemical Manufacturing Co, Liverpool
AMMONIUM PERSULFATE—100 dms, Mohegan International, Rotterdam
ANILINE DYES—2 dms, Geigy Chemical Corp, Liverpool
1 dm, General Dyestuffs Co, Guayaquil
7 dms, Sandoz Inc, Rotterdam
7 dms, Putnam Chemical Corp, Hamburg
50 dms, H Bruckmann & Lorbacher, Hamburg
4 dms, Heemsoth Kerner, Liverpool
ANNATTO SEED—56 bgs, Marcel Calvet, Kingston
140 bgs, Marcel Calvet, Guayaquil
ANTIMONY REGULUS—445 cs, Rijeka
BALSAM—2 dms, Polarome Manufacturing Co, La Libertad
BARIUM CHLORIDE—700 bgs, Lotte Chemical Corp, Trieste
300 bgs, Trieste
BARIUM SULFATE—345 cs, Picker x-Ray Corp, London
BEESWAX—66 bgs, Porcella Vicini & Co, Ciudad Trujillo
25 bgs, Machado & Co, Puerto Plata
30 bgs, Ciudad Trujillo
56 bgs, Puerto Plata
24 bgs, Strahl & Pitsch, Puerto Barrios
179 blks, Koster Keunen, Djibouti
101 bgs, Alexandria
BILE—4 dms, Wilson Lab, Buenaventura
BOIS DE ROSE OIL—10 dms, Hollander Trading Corp, Callao
2 dms, Hollander Trading Corp, Manaus
2 dms, Hollander Trading Corp, Belem
BRONZE POWDER—30 dms, Allied Manufacturing Co, Hamburg
100 dms, Leo Uhlfelder, Hamburg
145 dms, Crescent Bronze Powder Co, Hamburg
5 dms, Hamburg
BUTTONLAC—100 bgs, Mantrose Corp, Calcutta
50 bgs, Bradshaw Praeger & Co, Calcutta
100 bgs, Calcutta
CAJUPUT OIL—1 dm, Fritzsche Bros, London
CALCIUM CARBONATE—2,200 bgs, N H Weitzner, Antwerp
600 bgs, Pluess Staufer, Antwerp
600 bgs, Whittaker Clark & Daniels, Liverpool
CAMPHOR POWDER—37 cs, Prentiss Drug & Chemical Co, Keelung
CARAWAY SEED—700 bgs, Rotterdam
CARBON ACTIVATED—30 dms, London
CARDAMOMS—15 cs, S B Penick & Co, Mangalore
10 cs, Wm E Martin & Sons, Mangalore
10 cs, Kellys America Ltd, Mangalore
15 bgs, Lo Curto & Funk, Puerto Barrios
CASEIN—160 bgs, F H Paul & Stein Bros, Dublin
3,200 bgs, Crawford Kish & Co, Gdynia
600 bgs, Rotterdam
617 bgs, Hamburg
CASTOR OIL—500 tons, Chemical Bank, Rijeka
CELERY SEED—170 bgs, Ideal Trading Co, Bombay
CHESTNUT EXTRACT—600 bgs, Chase Manhattan Bank, Genoa
1,815 bgs, Barkey Importing Co, Genoa
CHLORAL HYDRATE—50 kgs, Gallard Schlesinger, Liverpool
CHLORINATED RUBBER—700 bgs, C M C Chemicals Inc, Liverpool
CINNAMON LEAF OIL—3 dms, Volkart Bros, Galle
CITRONELLA OIL—170 dms, George Uhe Co, Keelung
25 dms, L A Champon & Co, Keelung
6 dms, Volkart Bros, Galle
CITRONELLAL—6 dms, Lo Curto & Funk, Yokohama
CLAY, CHINA—3,084 bgs, Anglo American Clay Corp, Avonmouth
CLOVE—100 bgs, Djibouti
COBALT OXIDE—400 cks, Antwerp
COCHINEAL—52 bgs, H H Pike & Co, Las Palmas
COCONUT OIL—700 tons, Bank of America, Zamboanga
1,056 tons, Manila
COCONUT SHELL CHARCOAL—500 bgs, American Overseas Corp, Kingston
CODLIVER OIL—681 dms, Hanover Bank, Lisbon
COLOCYNTH PULP—39 bls, Meer Corp, Port Sudan
COLORS, DRY—1,200 bgs, Naftone Inc, Bremen
COPAIBA BALSAM—3 dms, Hollander Trading Corp, Manaus
4 dms, Peter Andrea Corp, Manaus
CORNMINT OIL—5 dms, Magnus Mabee & Reynard, Santos
4 dms, Polarome Manufacturing Co, Santos
CREAM OF TARTAR—500 bgs, Bank of N Y, Genoa
CUTTLEFISH BONE—125 cs, Lisbon
DAMMAR GUM—20 bgs, O G Innes Corp, London
DEGRAS—52 dms, H A Gogarty, Yokohama
52 dms, H A Gogarty, Nagoya
137 dms, Malmstrom Chemical Corp, Nagoya
50 dms, J Fries & Co, Manchester
50 dms, Malmstrom Chemical Corp, Manchester
8 dms, Olympic Shipping Co, Liverpool
20 dms, Malmstrom Chemical Corp, Rotterdam
DEXTRIN—400 bgs, Bestick Adhesives Inc, Rotterdam
2,051 bgs, Stein Hall & Co, Rotterdam
830 bgs, Morningstar Paisley Inc, Rotterdam
500 bgs, Rotterdam
DYES, COALTAR—21 dms, Orlex Dyes & Chemical Corp, Hamburg
48 dms, H Bruckmann & Lorbacher, Hamburg
ETHYL ACETATE—21 dms, H Bruckmann & Lorbacher, Rotterdam
FISHLIVER OIL—8 dms, Interocean Chemical & Minerals Corp, Yokohama
10 dms, Mitsubishi Corp, Yokohama
FUEL OIL—148,386 bbls, Metropolitan Petroleum Corp, Punta Cardon
107,381 bbls, American Oil Co, Puerto La Cruz
141,521 bbls, Shell Oil Co, Curacao
190,184 bbls, Signal Oil & Gas Co, Las Piedras
81,846 bbls, Central Petroleum Corp, Punta Cardon
170,000 bbls, Humble Oil Co, Aruba
335,600 bbls, Humble Oil Co, Caripito
695,022 bbls, Humble Oil Co, Las Piedras
106,790 bbls, Hess Inc, Punta Cardon
FULLER'S EARTH—40 dms, L A Salomon & Bro, London
GELATIN—250 bgs, King Shipping Co, Antwerp
223 bgs, Manhattan Adhesives Corp, Antwerp
100 bgs, Chemical Bank, Copenhagen
146 dms, B Young, London
GALLNUTS—200 bgs, Izmir
GERANIUM OIL—2 dms, Djibouti
1 dm, Cannes
GINGER—160 bgs, Cochin
240 bgs, Alleppey
GLUE—800 bgs, Jung Forwarding Co, Liverpool
GLUESTOCK—437 bls, Transatlantic Animal By Products Corp, Puerto Plata
GLYCERINE—300 tons, Procter & Gamble Co, Manila
GRAPHITE—600 bgs, Joseph Dixon Crucible Co, Bremen
500 bgs, Asbury Graphite Mills, Hong Kong
HEXAMETHYLENETETRAMINE—50 bbls, H A Gogarty, Antwerp
HOOF & HORNMEAL—440 bgs, Santos
ICHTHAMMOL—15 cs, Chas L Huisking & Co, Hamburg
IRON BLUE—13 dms, Van Oppen & Co, Liverpool
IRON OXIDE—600 bgs, F D Davis Co, Avonmouth
KAOLIN—25 dms, E Fougera & Co, London
KARAYA GUM—244 bgs, Stein Hall & Co, Bombay
62 bgs, Colony Import & Export Corp, Bombay
311 bgs, Morningstar Paisley Inc, Bombay
LACTIC ACID—50 dms, A Millner Co, Liverpool
LAVANDIN OIL—1 dm, Cannes
LAVENDER OIL, SPIKE—15 dms, L A Champon & Co, Barcelona
LEMONGRASS OIL—25 dms, Lo Curto & Funk, Puerto Barrios
25 dms, Leonhardt & Brush, Puerto Barrios
18 dms, Maywood Chemical Works, Cochin
LIME OIL—1 dm, Citrus & Allied Essential Oils Co, Puerto Plata
LIVER POWDER, DESICCATED—10 dms, Frank Samuel & Co, London
29 dms, Buenos Aires
LOCUST BEAN GUM—500 bgs, T M Duche & Sons, Portimao
300 bgs, Colony Import & Export Corp, Portimao
300 bgs, Colony Import & Export Corp, Portimao
200 bgs, J L Quesada, Portimao
LOGWOOD EXTRACT—30 dms, American Dyewood Co, Kingston
LUBRICATING OIL—50 dms, Asiatic Petroleum Corp, Liverpool
MAGNESITE—20 kgs, Madison-Lewis Inc, Hamburg
600 bgs, Trieste
40 bgs, Madras
MAGNESIUM CARBONATE—50 cs, Chas L Huisking & Co, Genoa
MAGNESIUM TRISILICATE—80 dms, Antwerp
30 bgs, Antwerp
MARJORAM OIL—1 dm, L A Champon & Co, Barcelona
MELAMINE—400 bgs, Ostrand
MENTHOL—11 dms, Biddle Sawyer Corp, Marseille
50 cs, Lo Curto & Funk, Santos
80 cs, American Far Eastern Syndicate, Santos
5 cs, Lee Trading Co, Pusan
60 cs, H A Gogarty, Kobe
MERCURY—250 flks, Koper
MOLASSES—477 tons, Pacific Molasses Co, Salaverry
MONOSODIUM GLUTAMATE—250 dms, Ajinomoto Co, Yokohama
MONTAN WAX—50 bgs, Rotterdam
MUSTARD SEED—160 bgs, C Gulden, London
NAPHTACHINON—47 dms, Ciba Co, Gothenburg
NAPHTHALENE—908 bgs, Koppers Co, Liverpool
1,380 bgs, J N Forker, Liverpool
2,678 bgs, Rotterdam
200 bgs, Antwerp
NAPHTHENIC ACID—2,994 bbls, Humble Oil Co, Aruba
p-NITROACETOPHENONE—12 dms, Fine Chemicals of Canada, Naples
NUTMEG—100 bgs, Chemical Bank, Port of Spain
42 bgs, Singapore
m-OCTYL-CHLORIDE—31 cs, United Ultramarine & Chemical Co, Hamburg
OLEORESIN PAPRIKA—5 dms, Lo Curto & Funk, Alicante
OLIVE OIL—50 dms, Hanover Bank, Pasajes
275 dms, Manufacturers Trust Co, Pasajes
50 dms, Morgan Guaranty Trust Co, Pasajes
243 dms, National City Bank, Pasajes
50 dms, J Victori, Barcelona
75 dms, Mawer Gulden Anis, Barcelona
20 dms, Lekas & Drivas, Barcelona
25 dms, Farnella Bros, Barcelona
50 dms, Bartolo Filippone, Barcelona
96 dms, Uddo & Taormina, Barcelona
275 dms, Manufacturers Trust Co, Malaga
25 dms, Hanover Bank, Malaga
150 dms, Bankers Trust Co, Malaga
196 dms, National City Bank, Seville
95 dms, Chase Manhattan Bank, Seville
49 dms, Bankers Trust Co, Seville
96 dms, Swiss Credit Bank, Seville
171 dms, Atlantic Bank of N Y, Seville
170 dms, Seville
25 dms, Valencia
ORANGE OIL, BITTER—1 dm, Citrus & Allied Essential Oils Co, Puerto Plata
ORANGE OIL, SWEET—25 dms, Fritzsche Bros, Kingston
PAPRIKA—100 bgs, A A Sayia, Alicante
750 bgs, J Weinstein, Alicante
175 bgs, Gallagher & Ascher, Alicante
60 bgs, Theobold Sales Inc, Alicante
100 bgs, J Raphael & Sons, Hamburg
150 bgs, National City Bank, Hamburg
200 bgs, Woolson Spice Co, Hamburg
475 bgs, M J Golombeck, Hamburg
1,000 bgs, R F French, Istanbul
PEPPER, BLACK—80 bgs, Delano Corp of America, Singapore
America, Singapore
210 bgs, Reliable Mercantile Co, Singapore
280 bgs, A G Dunn, Singapore
80 bgs, A G Dunn, Calicut
430 bgs, C M Van Sillevoldt, Singapore
80 bgs, George Uhe Co, Singapore
140 bgs, Irving Trust Co, Singapore
105 bgs, W L Wilmer, Singapore
640 bgs, Alleppey
420 bgs, Singapore

—Continued on page 61

Drugs, Fine Chemicals

—Continued from page 47

reports last week. Prices, unchanged, range from 35c. to 40c. a pound.

Gentian Root—Buying is constant but the quantities are on the small size. Schedule reads 24c. a pound on the root and 30c. a pound for both the ground and powdered material.

Gum Benzoin—Routine activity. Sumatra material is priced at 32c. a pound. The quote is described as firm.

Irish Moss—Buying interest is termed fair, supplies adequate. Prices are steady at 25c. to 27c. a pound.

Kola Nuts—Demand is normal, according to all recent reports. The listing is unchanged at 11c. to 12c. a pound.

News Briefs

NEW DOSAGE FORM: "Declomycin" demethylchlortetracycline, a broad-spectrum antibiotic, is now available in 75-mg., two-tone red capsules from Lederle Laboratories division of American Cyanamid Company, Pearl River, N. Y. Designed primarily for children, the capsules are supplied in bottles of 25. Price to direct retailer is $3.65.

RELIEVING ANXIETY: The tranquilizer "Atarax," which is widely used to control mild anxiety and tension has been found effective in treating severe neuroses and psychoses if given in relatively high dosages—often exceeding 1,000 mg. daily. A report of clinical trials appears in the Pennsylvania Medical Journal. "Atarax" is marketed by J. B. Roerig and Company, a division of Chas. Pfizer & Co., Inc., Brooklyn, N. Y.

TRIPLE-THREAT DRUG: A new combination drug to relieve premenstrual tension has been developed by the Up-John Company, Kalamazoo, Mich. Called "Cytran," it incorporates a diuretic to remove excess fluids that cause bloating and swelling; a hormone, progesterone, to correct body chemical inbalances during the premenstrual phase; and a mild tranquilizer to offset tension and jitters. It is said to be the first attempt to combine all three types of therapeutic aid in one preparation.

Alcohol Tax Regulations Get a Final IRS Okay

Rules changes for drawback of taxes paid on non-beverage alcohol—proposed last December by the Alcohol & Tobacco Tax Unit of the Internal Revenue Service—have received final approval from the Commissioner of Internal Revenue. They will be put into effect April 1.

One of the important changes in the rules has to do with retention of records for examination by internal revenue officers. They now provide that manufacturers must retain for two years all records required by the alcohol drawback rules, copies of Form-179 that evidence tax determination of the alcohol, and all bills of lading in respect to shipments of the alcohol.

In addition, a copy of each approved formula returned to the manufacturer must be retained for not less than two years from the date the manufacturer files his last claim for drawback under such formula. The records, forms and formulas must be kept readily available for examination.

Cancer Research Push

—Continued from page 4

ment and cure of cancer in the twenty-five years since 1937 and call attention to the tremendous opportunities that exist for improving the health and well-being of our people.

To carry out the last point, Mr. Fogarty would (1) adopt a nationwide campaign to spread the cancer information we already possess (2) bring together the nation's top scientists for a scientist-to-people report of cancer progress and (3) issue a special commemorative stamp for Cancer Research Year-1962.

'Increasing Trouble' Seen

Later, in a panel discussion on "How to Meet Competition—At Home and Abroad," Rep. Fogarty declared that the US drug and chemical industries are headed for increasing trouble from foreign competition unless they receive proper tariff protection.

Tougher business conditions in the US drug industry today, he said, can be traced directly to the "cheap" labor employed by foreign competitors.

At a panel discussion on Research, some fears were expressed concerning the pressure that can be exerted on industry by the increasing large investment of federal funds.

Universities, it was suggested, may find themselves in a similar position vis a vis industry, and it might be better to move some research projects from the universities to industrial institutions.

Speaking before a panel on industry's responsibility to the public welfare, Dr. George Archambault, of the Public Health Service, said there is no need for government control of the pharmaceutical industry "if there is sufficient selfdiscipline." Another panelist noted that "if the government passes legislation to hold down the profits of the drug industry this will restrict research efforts."

Sen. Jennings Randolph, addressing DCAT's thirty-fifth annual dinner, declared that "the answer to foreign competition and our balance-of-payments problem is not increased protectionism but increased trade."

The West Virginian urged the chemical and drug makers to renounce "artificial protectionism" and, instead, to search out "more positive and creative avenues" for marketing their products.

Phosphoric Demand

—Continued from page 7

has outstripped furnace-produced acid and in 1958 production of the latter—used in chemicals and foods—was 400,000 tons less than fertilizer-grade output.

"The increased production of wet-process acid reflects not only the increased demand for phosphate fertilizers but also a change in the type of fertilizer," Mr. Hignett observed.

This is the increasing trend toward high-analysis granular fertilizers which require concentrated phosphate materials. In 1960, ordinary superphosphate constituted 48 percent of the phosphatic materials supplied for use in fertilizers, as against 80 percent or more during the years before 1950, Mr. Hignett noted.

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- p-CHLOROBENZAMIDE
- p-CHLOROBENZHYDRAZIDE
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Essential Oils, Aromatics

Moderate price activity featured the market last week, and although the trend was downward, there was still a good, firm tone to things in general. The biggest feature was a price drop in Bourbon vanilla beans, but this was largely the result of new crop material arriving on the scene. Cardamom showed some weakness in one grade, but the others held firm. There was also an easier price tendency in Dutch caraway seed and Cochin ginger root, but on the whole it was not considered very serious. East Indian nutmeg showed strength and helped keep the market index at a figure only slightly lower than last week's.

An interesting note came to the trade's attention during the week concerning food for space men, which will have to be "miniaturized" while still being kept fresh and nutritious. Here is where the food and flavor chemists will play an important part. One of their first projects will concern lighter packages and foods adapted to them. The next will be to make eating easy under conditions of weightlessness and the third will be to combat the loss of flavor under unusual atmospheric conditions.

A Department of Commerce report during the week reveals that a manufacturing facility in Kuturgharbieh, Egypt, produced 616 pounds of essential oils last year. Other facilities recently completed in the country were: a plant in Alexandria to produce annually 200,000 tubes of hair preparations, one in Heliopolis to make 2 million tubes of paste for artificial teeth, one in Tanta to manufacture 1,800 metric tons of commercial glycerine and 600 tons of medicinal glycerine.

Price Trends

Advanced

Nutmeg, East Indian, 8c. per lb.

Reduced

Caraway seed, Dutch, ½c. per lb.
Cardamom, Alleppey, green, 5c. per lb.
Ginger root, Cochin, 1c. per lb.
Vanilla beans, Bourbon, 35c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Mar. 5, 1960
143.39	143.47	144.12	146.84

For Current Prices see Page 10

Essential Oils

Citronella—There has been a slump in demand for the Formosa recently, and the situation has been reflected by a general weakness in the price structure. Such a condition is also said to prevail in the Ceylon.

Geranium—The price for the Bourbon oil remains firm at a range of $20 to $22 a pound. Some sources seem to think this is a little unusual since there is a good crop of the material available this year. So far this season there have been no hurricanes in the growing area, a region often plagued by severe storms in the early part of the year. Thus the abundance of the crop.

Lemongrass—Something of an anomaly prevails in the market for this big-moving oil. Supplies at the present time are reported to be short, but the market still holds firm at $2.45 to $2.50 a pound. This is considered additionally surprising in light of the prediction that the new crop (May and June) is expected to be about 10 percent lower in price.

Lime—Dealers report that the market is firming. Prices continue at their previously quoted ranges: Mexican distilled, $5—$5.60 per pound; West Indian, $5—$5.60 per pound, and West Indian expressed, $6.50—$8 per pound.

Macrocarpa Bunge—Peels of the citrus macrocarpa bunge, which is cultivated in India, have been distilled, according to an Indian trade journal.

Some 0.71 percent of essential oil was obtained from this steam distillation. It has the following composition: 91.85 percent d-limonene and dipentene; 2.47 percent linalool; 1.39 percent alpha terpineol; 1.37 percent linalyl acetate; 1.06 percent citral; 0.58 percent geraniol; 0.15 percent methyl anthranilate.

Sandalwood—This oil is reportedly sold ahead to April. The position for May is strong.

Seeds and Spices

Caraway—Dutch material has weakened. From the previous price of 19c. per pound, the price has come down to 18½c.

Cardamon—A general tone of easing has been noted. Among other declines, Alleppey green has dropped from $2.10 per pound to $2.05.

Cassia—Reports in the trade are that there is some difficulty in putting together supplies of the broken, even for May shipment. However, it is said that there are odd lots available on spot and afloat at full levels. The winter mood has fallen upon the Batavias and Korintjes, and they are behaving accordingly.

Coriander—A stronger note has been reported in the Roumanian. As a result this material is firm at 14c. How the price structure will tend in the immediate future, however, is still regarded as anybody's guess.

Ginger Root—The temper of this market is just about what it had been in recent weeks, although it is considered quite possible that there could be some interesting fluctuations in the days to come. Cochin root at 18½c. seems to be an indication that such a condition is starting to set in The price is down 1c. per pound from what it had been. The Cochin is quite cheap compared to the other grades, but it has been pointed out that the end of the shipping season is just about here.

Nutmeg—A considerable advance has been noted in the East Indian—up from $1.10 to $1.18 per pound. But, despite this strengthening at the source, it is re-

Essential Oils Imports: November

	Principal origin	Net Quantity Pounds	Value
Cinnamon leaf, Cinnamon	Seychelles	17,654	$18,636
Geranium	France	11,416	235,965
Rose, Otto of roses oz.	Bulgaria	1,744	47,700
Bergamot	Italy	10,459	113,142
Citronella	Taiwan	242,000	192,849
Lemongrass	India	23,906	48,117
Lavender	France	64,578	92,606
Lavender, spike	Spain	51,039	80,640
Lemon	—	1,270	4,511
Orange	—	612	1,534
Sandalwood	India	1,031	18,364
Lime	Mexico	13,186	65,304
Almond, Bitter	—	1,013	1,577
Camphor	—	23,240	3,479
Caraway	Netherlands	5,622	16,207
Canarga	France	3,206	46,201
Lignaloe	Peru	27,096	41,690
Orange flower	—	75	4,585
Petitgrain	Paraguay	17,522	32,626
Rosemary	Spain	12,279	10,352
Thyme	—	1,425	3,328
Clove	Madagascar	37,575	34,123
Eucalyptus	—	14,174	6,007
Grapefruit	—	250	443
Patchouli	Indonesia	7,734	39,449
Cornmint	—	3,968	8,060
Pine needle	—	384	817
Ocotea Cymbarum	Brazil	107,923	34,831
Vetiver	Haiti	4,974	66,098

Source: Bureau of Census.

Essential Oils

ported that there has been not much more than a "minor ripple" here.

Pepper—Prices remain unchanged. Both Malabar and Lampong black remain at 47c. per pound. Muntok white, which previously had no spot price listing, is now being quoted at 73c. a pound.

The strength that had been noted in listings during the past few weeks was reported to be waning a bit. Some sources thought this was a continuation of the up-and-down pattern that had been seen since the first of the year. Supply and demand are still pretty much in the nip-and-tuck stage.

As far as the white is concerned, there are said to be some small lots of Brazilian available on spot. The shipment levels of Muntok are not very high and some experts think that for just that reason they should begin to attract attention.

Tarragon—Imported fancy material has fallen off in price. The current figure is 95c. a pound, from the old listing of $1.05. Domestic material has also followed the pattern. It is now listed at 55c. a pound, which represents a decline of 20c.

Vanilla Beans—Arrivals of the new corp Bourbon material have further lowered prices.

Bourbon has come down from its previous range, $6.85 to $7.10 per pound, to $5.50 to $6.65 per pound. Mexican material remains at the previous ranges. The cut continues between $7.25 and $7.50 per pound and Mexican whole is between $7.65 and $8.50.

Carbide Will Fight

—Continued from page 7

about 51.5 million pounds of resins, or about 39.7 percent of all the resins shipped to film extruders that year, the examiner said. In 1959, he added, Visking purchased nearly 84 million pounds of resin, an amount almost equal to the combined shipments of 84.8 million pounds to film extruders made by five leading resin producers.

If the commission should uphold Mr. Lipscomb's decision, Carbide would be required to restore Visking as an independent manufacturer of polyethylene film.

This would mean relinquishing various assets, including the new polyethylene film plant recently built at Cartersville, Ga. The company could retain only those Visking assets used in the manufacture of sausage casings.

Petrochemical Men Zero In

—Continued from page 7

heat "for petrochemical plants built across the fence."

Theodore A. Dungan, of Bechtel Corporation, San Francisco, saw the gulf area "as the industrial Cinderella of the mid-twentieth century"—with an unbeatable combination of fluid energy, low-cost water-borne transport facilities and flat land ideally suited for pipelines.

As a result of these advantages, he noted, "the petrochemical industry here has an annual growth rate of 20 percent."

The increasing importance of the Gulf coast salt domes for the future of the petrochemical industry in the New Orleans area was underscored for the meeting in a paper by John M. Dale, of the Southwest Research Institute, San Antonio, Tex.

"When the petrochemical industry got its start, petrochemicals were unquestionably petrochemicals, i.e., they were derived solely from petroleum," Mr. Dale Said.

"Today," he went on, "many of the products that leave the Gulf coast have such large amounts of chlorine and sulfur chemically bound in them that one hesitates to say 'petrochemical' loud and clear. A better title might be 'salt dome chemicals'." The point is that there has been a noticeable trend in the past few years for our bigger petrochemical companies to locate their plants next to salt domes.

Mr. Dale cited plants at Freeport and Bay City, Tex.; Plaquemines, and Geismar, La., and declared that this is a trend which will become more pronounced.

Cities Service Tells Interest In Butyl Rubber Venture

Cities Service Company late last week confirmed that it is studying a joint butyl rubber venture with Thiokol Chemical Corporation, Bristol, Pa.

It is understood that if an agreement is reached, Thiokol will be responsible for marketing the product. In the past, Thiokol has acted as sales agent for Petroleum Chemicals, Inc., a joint subsidiary of Continental Oil Company and Cities Service.

The venture would become the nation's second butyl rubber operation. Right now the sole US producer is Humble Oil Refining Company, whose product is marketed by Enjay Chemical Company.

Syntex Sets Up Division For Non-Hormone Specialties

Syntex Laboratories, Inc., New York has formed a new operating unit, known as the Clark-West Division, to manage the manufacturing and distribution of non-hormone ethical specialties.

Clark-West will assume responsibility for "Aqua Ivy"—both an oral and injectable prophylactic against poison ivy. For the 1961 season, it will introduce a new higher potency tablet to simplify dosage schedules, and to bring new economy to the patient, the company says.

Bids Wanted

Adhesive, Spec. MIL-C-4003 (USAF), Amend. 1 (QPL), 46,040 qts. Bid IFB 63077-2679-61B, Mar. 20. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

Dimethyl Phthalate, to be in accordance with Spec. JAN-D-709, Amend 1, dated June 1, 1949, 30,000 lbs. Bid IFB 174-107-61, Mar. 13. Naval Propellant Plant, Indian Head, Md.

Drugs, Acetic Acid, glacial, USP, 5 pt., 528 bots.; **Ammonia** solution (strong), USP, 1 pt., 2,256 bots.; **Calcium Carbonate,** precipitated chalk, 1,080 bots.; **Formaldehyde,** solution, USP, 1 pt., 2,160 bots.; **Methanol,** analyzed reagent acetone free, 1 pt., 1,152 bots.; **Methylparaben,** 1 oz., USP, 576 bots.; **Methyl Salicylate,** USP, ¼ lb., 672 bots.; **Paraffin,** NF, MP, 54.4-55.6 degrees C., 1 lb. grade A, 1,440 bots. Bid IFB M5-86-61, Mar. 16. **Ferrous Sulfate** tablets, USP, 0.324 gh. (5 gr.) 1,000s, sugar coated, chocolate colored, 360 bots.; **Magnesia Magma,** USP, 1 gal., 11,880 bots.; **Methenamine Mandelate** tablets, USP, enteric coated, chocolate colored, 0.5 gh., 500s, 72 bots.; **Morphine Sulfate** tablets, 0.016 gm., 100s, USP, hypodermic, 672 bots.; **Olive Oil,** 1 qt., USP, 960 bots.; **Orange Peel** tincture, sweet, USP, 1 pt., 384 bots.; **Pentobarbital Sodium** capsules, USP, 0.1 gm., 500s, 840 bots. Bid IFB M5-86-61, Mar 16. **Aminoacetic Acid,** 1 lb., NF, powder, 912 bots.; **Ammonium Chloride** tablets, NF, 0.5 gm., enteric coated, chocolate colored, 1,000s, 192 bots.; **Atropine Sulfate** tablets, USP, hypodermic, 0.4 mg., 100s, 2,688 bots.; **Belladonna** tincture, 1 pt.; USP, 912 bots.; **Cascara Sagrada** fluid, extract aromatic, 1 pt., USP, 720 bots.; **Dextro Amphetamine Sulfate** tablets, USP, 5 mg., 1,000s, 240 bots.; **Glycerine** suppositories, USP, adult, 12s, 18,240 bots.; **Grisofulvin** tablets, 250 mg., 500s, 1,680 bots. Bid IFB M5-88-61, Mar. 16. Marketing Division for Drugs and Chemicals, VA Supply Depot, Somerville, N. J.

Enamel, various Federal Spec., 9,524 gals. Bid IFB 63077-2547-61B, Mar. 23; **Enamel,** green, Spec. Fed. TT-E-8485D, type 1 (QPL), 222,620 gals. Delivery to NSC Oakland, Calif.; an additional quantity of 15,000 gallons is being reserved for small business under a partial determination. Bid IFB 63077-2587-61 B, Mar. 23. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

Fertilizer, granular, or pulverized form. Fed. Spec. O-F-241A, 79,500 lbs. IFB SE 23-223148, Mar. 9. General Services Administration, Region 9, Business Service Center, 909 First Ave., Seattle 4, Wash.

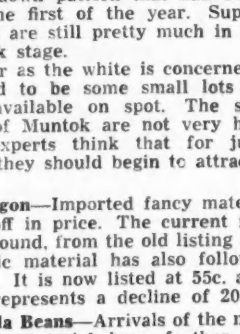
Herbicide, schedule 1, grade B, xylene or aromatic solvent, minimum 65,000 gals.; Schedule II, 2,4-D Amine, min. 10,000 gals., deliveries under the above schedules to be f.o.b. Bureau of Reclamation, underground storage tanks, at various points on the Columbia Basin Project, Wash., as required during the period from date of award through Nov. 15, 1961. Schedule III, copper sulfate (blue vitriol) nut size, packed in 100 lb. bags, 80,000 lbs., f.o.b. Ephrate and Othello, Washington. Bid IFB 116-671-61, Mar 10. Bureau of Reclamation, Procurement Section, Code 311, P. O. Box 388, Ephrata, Wash.

Lacquer, clear and pigmented, Spec. Fed. TT-L-58, Amend. L, Type II, 9,400 gals., delivery to NSC, San Diego, Calif. Bid IFB 63077-2652-61B, Mar. 13. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

N-Nitrodephelylamine, 10,000 lbs. Bid IFB 174-108-61, Mar. 13, to be in accord. with Spec. MIL-N-2299A. Naval Propellant Plant, Indian Head, Md.

Plastic Coating, 11,900 lbs. Bid IFB 63077-2585-61B, Mar. 14. Military Industrial Supply Agency, 700 Robbins Ave., Philadelphia 11, Pa.

Silver Nitrate, CP, crystal, 150,000 oz. IFB 174-122-61, Mar. 14. Naval Propellant Plant, Indian Head, Md.



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Coatings Materials

Zinc oxide prices took another tumble last week with the announcement of one leading zinc producer that two grades of the leaded zinc oxide have been cut an average of three-quarter cents per pound. The lower price went into effect on February 21, and just about completes the cycle of reductions that began late last year when zinc metal prices were reduced. In rapid order, reductions were posted on listings for zinc dust, and several grades of the zinc oxide.

The zinc market has been troubled by a combination of over-production on the domestic scene with an influx of imported material complicating matters further. Domestic producers have taken steps to reduce output, but a solution to the problem of imports is still lacking.

A linear polyethylene plant with a designed capacity of 60-million pounds-a-year is reported on the drawing boards of one leading chemical company. The new polyethylene plant will designed capacity of 60-million pounds mark the company's entry into the linear polyethylene field and will be adjacent to an existing, conventional, plant located at Houston, Texas. Cost of the project is placed by trade sources between $10 and $15 million. On stream production dates have not been announced.

Spot coatings markets were featureless for the week. Casein failed to move from its position in prices or activity range of 16¾ to 17 cents per lb. No improvement in the supply position of casein is reported. Offerings continued to lack takers. Other imported caseins, Australian, New Zealand and Polish, shared the same marketing fate: listings unchanged, supplies more than ample.

Liquid shellac shipments were reported improved on the basis of increased demand on the part of consumers inventory build-up. Shipments of Indian shellac, seedlac, and other lacs out of Calcutta in January totaled 33,745 packages, a small decrease from December's total of 36,151 packages.

Price Trends

Advanced
None

Reduced
Zinc oxide, leaded, 12%, ¾c. per lb. 18%, ⅝c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Mar. 5, 1960
104.55	104.55	104.56	103.03

For Current Prices see Page 10

Prime Pigments

Cobalt Oxide—Use of cobalt for pigments rose from 129,000 pounds of content in the 1950-54 years to 200,000 pounds in 1959, reports the Bureau of Mines on its preliminary roundup of cobalt production and consumption figures.

Despite the increase in production in 1959, the Bureau reports that this figure did not match the peak years of 1955 and 1956 when consumption of cobalt for pigment uses was placed at 236,000 pounds and 232,000 pounds, respectively.

Overall consumption of cobalt in 1959 was up some 31 percent, as a result of improved business conditions, says the Census Bureau. This marked the largest industrial use (9,900,000 pounds) since 1953.

Zinc Oxide—The zinc market slipped a few more notches as two leaded zinc oxides were reduced an average of three-quarter cents per pound, according to the announcement made by one leading producer.

The two grades that were reduced last week are the 18 percent and 12 percent leaded grades. The new price schedule calls for a price of 11.25c. per lb. for car lot or truck load shipments and 11.75c. per lb. for 10 tons or more. Less than 10 ton lots are set a 12.25c. per lb. The 18 percent leaded zinc oxide is at 12.375c. per lb. for carload shipments and 12.875c. per lb. for 10 ton lots, with the less than 10 ton lots category calling for 13.375c. per lb.

The new price schedule went into effect on Feb. 21, and is the third in a series that has forced zinc prices downward. A few months ago zinc metal dropped a 1½c. per pound, followed by zinc dust and zinc oxide.

Lacquer Materials

Cellulose Butyrate Acetate—Routine market conditions to dominate the long-standing market trend in this market. Prices for cellulose acetate butyrate power, with 17 percent content butyryl, in bags, delivered East, is .545 to .555c. per pound. For 27 percent butyryl content, same basis, .595 to .605c. per pound. For 38 percent butyryl content, same basis, .545 to .555c. per pound (same price for 38 percent butyryl content, half-second). For 50 percent content butyryl, same basis, .585 to .595c. per pound.

Plasticizers—The Tariff Commission reports that production of dibutyl phthalate in December was way off the mark set in the previous month. For November, output was placed at 1,068,312 pounds, dropping to 675,607 pounds in December.

Production of dioctyl phthalate in December (including di-n-octyl, di-isooctyl, (di(2-ethylhexyl) phthalate and mixtures) was up sharply in December reaching 14,744,451 pounds as against 12,485,230 pounds in November.

Tricresyl phosphate production increased slightly in December, reports the Tariff Commission. For the last month of 1960, production was placed at 2,895,724 pounds, compared to 2,211,665 pounds in November.

Currently, the plasticizer picture is reported to be on the firm particularly in regard to the phthalate esters where both supplies and demand have picked up in the last month. Listings are reported to be unchanged for all of the phthalate esters.

Synthetic Resins

The following figures show sales in pounds for December and list November's figures for comparison, as reported by the Tariff Commission:

	Sales November*	Sales December**
Phenolic and other tar acid resins:		
Molding resins	13,350,269	12,537,133
Laminating resins	3,413,939	3,011,133
Protective coating resins, modified, unmodified, except by rosin	1,542,063	1,223,311
Urea and melamine resins:		
Protective coating resins, straight modified	1,764,342	1,894,156
Styrene resins:		
Protective coating resins, straight modified	5,019,536	4,891,931
Vinyl resins:		
Total all types	92,512,251	81,089,431
Alkyd resins for protective coatings:		
Phthalic anhydride types, unmodified	6,559,106	6,752,004
Modified with tar acids, rosin and or other material except styrene	3,053,628	2,965,558
Polybasic acid types except phthalic:		
Unmodified	407,385	431,611
Modified with tar acids, rosin and or other material except styrene	291,698	272,238
Rosin modification for protective coatings:		
Rosin, rosin esters, unmodified (ester gums, esterified with glycerol)	729,578	920,314
Esterified with other alcohols, pentaerythritol, glycols, etc.	513,678	661,244
Modifications with phenolic and other tar acid resins	1,362,579	1,515,940
Modifications with maleic and fumaric acids	1,383,373	1,747,580
All other modifications	3,545,273	4,306,673
Coumarone-indene and petroleum polymer resins	17,606,739	15,213,064
Miscellaneous plastics and resin materials	21,384,314	20,422,765

* Revised. ** Partly estimated.

Natural Resins

Gums—Over the past few weeks the market for congo copal, and dammar gums has been reported as steady. Prices remain stable at their recently established level. Nor interruption in shipments from the Congo is reported and as a result supplies at both the primary and secondary marketing points are considered ample for all needs.

Shellac—With some added buying of liquid shellac reported on the past of consumers interested in building inventories, trade sources report that activity in the shellac market is beginning to pick up. Industrial sales are reported to be about normal for this time of the year.

Miscellaneous

Casein—The market for casein failed to regain any strength as listings for the week continued to hold in the lower

ranges as in previous weeks. That old problem of reduced demand, increased supplies remains the central problem in the casein market.

Offerings are reported to be plentiful but have not induced consumers to buy. As a result supplies are reported to be more than ample, with the possibility of real supply problem developing. Argentine casein is still in the range of 16¾c. to 17c. per pound with Australian, New Zealand and Polish casein prices unchanged from earlier levels.

Naval Stores

USDA reports that for the second straight week the activity in the gum naval stores market continued to be dull with prices holding the same ranges as in previous weeks. Volume of sales at 1,638 drums equivalent is reported to be comparably small.

Prices for drums were reported at: $15.20 to $17.15 for WG, with trading mostly at $15.20 to $17.02. M and below was at a range of $14.13 to $14.25. Tankcar prices for M and below was placed at $13.80. No bag sales reported.

The turpentine market gained strength during the week as free stocks are reported to be becoming limited. Overall sales were at 28,000 gallons, compared to 14,000 for the previous week. Tankcar price for turpentine was reported in the range of 48¼c. to 48½c. per gallon.

UK, France, Italy

—*Continued from page 7*

could be close to the level prevailing in the United Kingdom and Germany."

Using 1953 as the base year, the French index of chemical production for 1958 was 202 versus 150 for total industrial production, Mr. Escherich reported.

The inorganic chemical industry index was reported at 158; and the organic index, which includes petrochemicals and plastics, at 305.

Italy is well prepared to meet increasing competition from the gradual implementation of the European Common Market, said Dr. Mario Ottolenghi, vice-president of Novamont Corporation, Montecatini's United States subsidiary.

Since 1958 and projected through 1962, Italy will have spent the equivalent of $417 million on her chemical industry, principally petrochemicals, an amount exceeded only by West Germany and the United Kingdom, Dr. Ottolenghi added.

Estimated production in 1960 was 600 million pounds, as compared with 115 million pounds in 1953. Production in 1961 is expected to reach 880 million pounds.

Food Additives Processing

—*Continued from page 3*

uses of chemicals in food production, processing or handling.

- Of these, 100 were not complete enough to be filed; forty-two did not relate to food additives; 178 are being actively evaluated; fifty-nine led to the issuance of regulations stating safe conditions of use, and a few petitions were withdrawn after filing.
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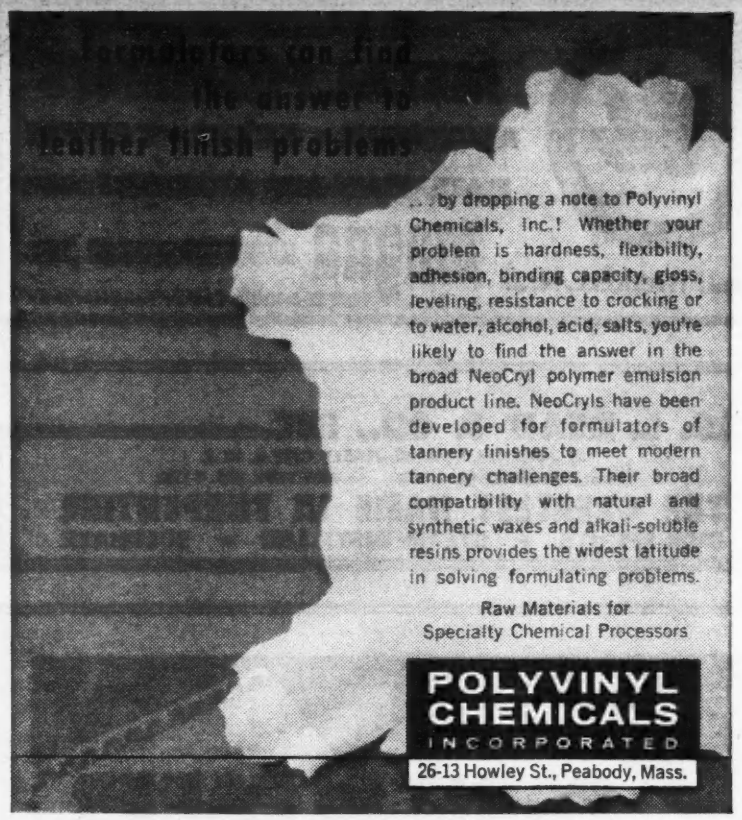
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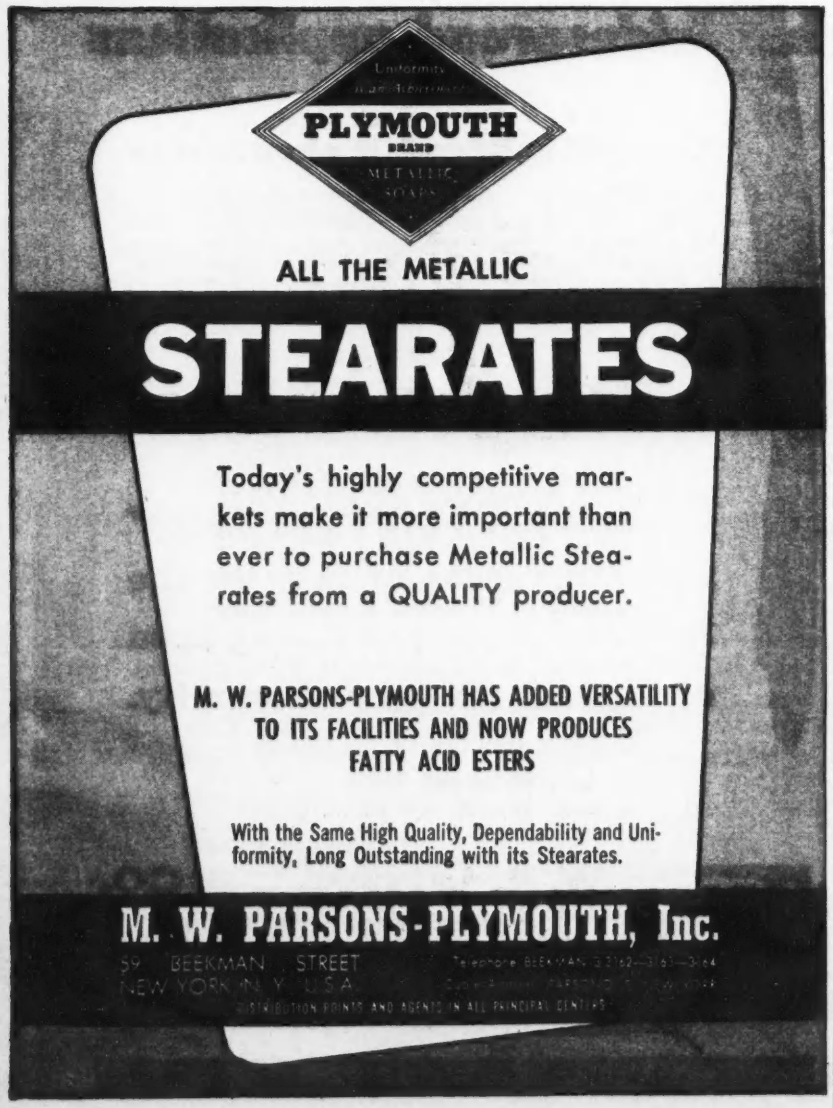
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Jobs & People

American Mineral Spirits Company, Chicago—Richard J. Wilson has been appointed a sales representative for aliphatic and aromatic naphthas and waxes, with headquarters in Chicago.

Dow Chemical Company, Midland, Mich.—**Dr. W. G. Lloyd,** research chemist, has been elevated to the rank of associate scientist for his achievements in the polymer research laboratory.

National Aniline Division, Allied Chemical Corporation, New York—**C. C. Coakley,** director of operations, has retired after forty-three years with the company. **E. John Bartolini** has been named assistant manager of special projects.

Monsanto Chemical Company, St. Louis, Mo.—**William T. Cave** has been named assistant director for analytical chemistry at the St. Louis research center.

Pittsburgh Plate Glass Company, Pittsburgh, Pa.—**Dr. Howard H. Hoekje** has been named manager of applied inorganic research.

Solvay Process Division, Allied Chemical Corporation, New York—**Dr. Elwood F. Booth, jr.,** has been named assistant director of research; **Dr. Edward R. Degginger,** research supervisor; and **Dr. Michael J. Skrypa,** associate research supervisor.

Thiokol Chemical Corporation, Ogden, Utah—**Harold D. Germann** has been appointed manager of government operations for the west coast district.

Union Carbide Metals Company, a division of Union Carbide Corporation, New York—**L. R. O'Brien** has been appointed superintendent of the Portland, Ore., plant.

Monsanto Now Marketing 105 Percent Phosphoric

Monsanto Chemical Company has started marketing 105 percent phosphoric acid from its newly-completed plant at Addyston, Ohio.

The product is 40 percent more concentrated than normal 75 percent acid.

Called "Phospholeum" by Monsanto, the acid is a natural desiccant. It is said to be an excellent agent for rendering inactive many common trace minerals (such as calcium, aluminum and magnesium) which frequently interfere with chemical processing.

ICI Plants a Foot

—Continued from page 3

of its efforts to export chemicals from Britain.

London observers are inclined to tnink that ICI would have gone ahead with its Rotterdam project even if Britain had given more certain signs of joining up in some way with the European Common Market.

They note that Western Europe is the fastest growing chemical market in the world, particularly for petrochemicals, and ICI's decision is likened to that of the numbers of US chemical firms moving into Europe—though few have jumped in with plans as large as ICI.

Parke-Davis Set to Build $600,000 Branch in Peru

Parke, Davis & Co. says it will begin construction soon on a $600,000 combined manufacturing laboratory and sales branch in Lima, Peru. The project calls for building a manufacturing unit in which the complete line of Parke-Davis antibiotics, and capsule and fluid pharmaceuticals will be produced plus an administration and employees' building and a cafeteria.

Parke-Davis has eighteen other overseas manufacturing branches in Europe, Asia, and Latin America.

Celanese Head Retires

Kenneth C. Loughlin has announced his retirement as president of Celanese Corporation of America after thirty-two years with the New York-based company. He will continue as a director.

Styrene Price

—Continued from page 3

range from 17 cents a pound, drums, carlots, delivered, to 19 cents a pound, less carlots, same basis.

Industry observers note a number of reasons for the drop in prices. Most frequently cited is rapidly rising over-capacity.

Then, too, it's conceded by producers that consuming demand from their chief buyer, the rubber industry, is somewhat less than lively.

Rubber Demand Is Off

In fact, one source points out, demand in January was off 15 percent from that of January, 1960. February was somewhat worse.

To top it all off, there have been persistent rumors of shading in both polymer grade and rubber-grade material for months.

Lurking in the minds of some observers are two influencing factors in the price-cut which, while not pronounced, are distinct threats:

- Rubber companies and butadiene companies are continually looking into the possibility of making styrene themselves. There are ten butadiene producers which do not have styrene plants, and there are five SBR rubber makers which have neither styrene nor butadiene of their own.

Further, with the fast build-up in benzene capacity, it's more than likely that petrobenzene producers, anticipating a possible over-supply of benzene in the near future, might decide to upgrade into styrene.

- In an increasing number of applications, polyvinyl chloride resin is competing with polystyrene. When one is cheaper than the other, it is used as a matter of course where particular properties are not desired.

The recent price cut of vinyl chloride monomer from 11 cents to 8.9 cents a pound in tankcars certainly did nothing to strengthen the polystyrene market.

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Oils, Fats and Waxes

Drastic advances in soybeans and oil futures which temporarily boosted cottonseed and soybean oils sharply were not sustained and prices closed ⅛ cent per pound higher for the week. At one time market was up more than ½ cent. Corn continued stronger and advanced ¾ cent, while peanut oil was easier, off ¼ cent. The uncertainty of futures market kept refiners on the sidelines. Producers of shortening advanced bulk lots 1 cent per pound. Crude coconut oil was weaker and declined ⅜ cent per pound on the Pacific coast and New York markets.

Trend of tallow and grease continued upwards, prices advancing ⅜ to ½ cent per pound. The supply situation has become tighter owing the heavy export sales to Russia reported from 30,000 to 50,000 tons chiefly of lower grades. This combined with sold up production kept offerings scarce and closely held at the higher levels. Lard was irregular and closed steady, advancing ¼ cent per lb.

Trading in industrial oils continued restricted to actual needs, though deliveries against contracts moved in better volume. Tung oil became easier, declining ½ cent because of lower sales of government oil and lack of buying interest. Linseed oil was unchanged and steady. Improved consumer interest was reported for oiticica oil and fair volume of business was reported for prompt needs. Rapeseed oil was in limited supply and well held at recent advance of 3 cents per pound.

Soybean meal was easier and closed unchanged, while cottonseed meal advanced $2.50 per ton; peanut meal, $2 per ton and linseed meal, 50 cents per ton.

Price Trends

Advanced

Corn oil, crude, ¾c. per lb.
Refd., ¾c. per lb.
Cottonseed oil, crude, 1/16c. per lb.
refd., ⅛c. per lb.
Cottonseed meal, $2.50 per ton.
Grease oils, 1c. to 1½c. per lb.
Greases, ⅜c. to ½c. per lb.
Lard, cash, ¼c. per lb.
Linseed meal, 50c. per ton.
Peanut meal, $2 per ton.
Soybean oil, crude, 1/16c. per lb.
refd., ⅛c. per lb.
Tall oil, refd., ¾c. per lb.
Tallow, inedible, ⅜c. to ½c. per lb.

Reduced

Cocoa butter, 1½c. per lb.
Coconut oil, crude, ⅜c. per lb.
Copra, $5 per ton.
Lard, cash, 3/10c. per lb.
Peanut oil, crude, 1/16c. per lb.
refd., ¼c. per lb.
Tung oil, ½c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Mar. 5, 1960
110.09	108.67	106.60	114.82

For Current Prices see page 10

Vegetable Oils

Castor—This market was quiet and unchanged. No. 1 Brazilian was quoted at 17½c. per pound, tankcars, New York, prompt delivery. Domestic oil demand was confined to actual needs.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week		1,000,000
Previous week		720,000
Corresponding week, 1960	103,500	3,122,000
Total this year		14,194,000
Corresponding period, 1960	903,450	18,246,000

Coconut—Crude was easier and declined ⅜c. Tankcars were reduced to 11⅝c. per pound, f.o.b. Pacific coast, March shipment. Trading was slow. The New York market was also lower at 13⅛c., tankcars, prompt delivery.

General Services Administration sold 7 million pounds of crude coconut oil at prices ranging from 11c. to 11.56c. per pound, bulk from the government stockpile last week and rejected bids for another 6 million pounds.

Corn—Market was stronger and fractionally higher. Crude advanced to 16⅝c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was boosted to 20.25c., tankcars, New York basis.

Cottonseed—Heavy liquidation in futures wiped out sharp gains and resulted in the market closing practically unchanged for the week. Sharp advances took place because of the upward surge of soybeans and oil futures, but higher levels were not sustained when the latter broke wide open. Trading was active and reached weekly record levels. Interest in cash oil continued inactive. Refined salad was quoted at 16⅜c. per pound, tankcars, New York, prompt delivery.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, March 3, follow:

	Sales	High	Low	Close
		Cents per Pound		
March	424	15.30	14.18	14.65@14.69
May	1,729	15.42	14.57	14.87
July	2,004	15.50	14.65	14.95S
Sept.	360	15.04	14.00	14.54@14.60
Oct.	247	13.85	13.40	13.85@13.93
Dec.	41	14.35	13.30	13.62@13.70

Total sales and switches, 4,805 contracts.

Higher prices for crude oil were not sustained, the market closing unchanged for the week. Sales were reported at 12⅜c. per pound, tankcars, in the Valley; 12¾c. to 12⅞c., nominal, southeast; 12½c., nominal, Lubbock and 12⅝c., nominal, Waco.

Disappearance of refined cottonseed oil in January was indicated at 3,357 tankcars against 2,599 in December and 3,105, January last year. Total for 6 months (August-January) was 15,047 tankcars compared with 13,713 for the same period last year. Visible supply at end of January was estimated at 17,359 tankcars, against 17,916 a year ago.

Olive—Shipments from primary sources were scarcer and firm. Offers from Spain were light and maintained at $52.50 per 100 kilos, drums, f.o.b. ports, March-April shipment. Tunisian oil was held at $54.50 per 100 kilos, drums, c. and f. New York for prompt shipment. Local market was quiet and steady at $2.35 to $2.40 per gallon, drums, duty paid, exwarehouse.

Peanut — Crude closed easier and sold at 13¾c. per pound, tankcars, f.o.b. mills, prompt shipment, following sales at ¾c. higher. Refined oil was quoted at 16¾c., tankcars, New York, prompt delivery.

Soybean—Market fluctuated widely with soybeans futures, but early gains were not sustained and prices closed slightly higher for the week. Crude was nominal at 12⅞c. per pound, tankcars, Decatur, unrestricted, March shipment. Refined salad oil was quoted at 15⅛c., tankcars, New York, prompt delivery.

Spain purchased 50,000 tons of soybean oil last week for shipment starting this month and India bought 3,000 tons.

Disappearance of crude soybean oil in January totaled 6,183 tankcars compared with 6,592 in December and 5,567, January last year. Total for 4 months (October-January) was 23,787 tankcars against 22,032 for the same period last year. Visible supply at end of January was estimated at 25,736 tankcars against 22,491 a year ago.

Tung—Lower sales of government owned oil, weakened the market and quotations declined ½c. Consumer interest continued slow. Tankcars were quoted at 29c. per pound, New York basis for prompt delivery. Drums were lower at 31c. to 31½c. per pound, depending upon quantity.

CCC sold 180,000 pounds of tung oil at 27.51c. to 28c. per pound, bulk, f.o.b. Marero, La., for unrestricted use last week, ½c. per pound less than the previous week. An offer of 200,000 pounds will be made by the agency this week.

Miscellaneous

Cocoa Butter—Market was easier and declined 1½c. Stocks on spot ranged from 53½c. to 58½c. per pound, depending upon quantity.

Copra—Market was inactive and lower at $157.50 per ton, c.i.f. Pacific coast for prompt shipment.

Flaxseed—Price advance of 5c. a bushel brought out sharply increased offerings and large volume was traded before bids receded to $3.03, spot and to-arrive, basis Minneapolis. Only eight cars traded in the spot market, but to-arrive bookings reached 48 cars and nearly 250,000 bushels in roundlots ahead of the decline. Most trades were at $3.08, the highest price since 1960-crop began to move.

Fats and Greases

Greases—Market was stronger and fractionally higher. Trading was light, chiefly for actual needs. Offerings continued

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Oils, Fats and Waxes

scarce. Choice white grease ranged from 9⅝c. to 9⅞c. per pound, tankcars and yellow, 6¼c. to 6½c., same basis.

Lard—Early advances were not sustained and market closed lower for the week. Cash lard was quoted at 13.90c. per pound, drums, Chicago.

Tallow—Tighter supply condition due recent heavy exports to Russia reported from 50,000 to 60,000 tons, principally lower grades further stiffened this market. Prices were up ⅜c. to ½c. per pound, depending upon quantity and seller. Offers continued scarce. Bleachable fancy ranged from 7¼c. to 7½c. per pound, tankcars, delivered; prime, 7c. to 7⅛c.; guaranteed fancy, 7⅝c. to 7¾c.; special, 6¾c. to 6⅞c. and No. 1, 6¼c. to 6⅝c., same basis. Guaranteed fancy was sold at 8¾c., drums, f.a.s. and nominal at 7⅞c., bulk, f.o.b. steamer.

Cake and Meal

Cottonseed Meal—Higher prices were named for limited available supplies. Meal, 41 percent, was raised to $57 to $59 per ton sacked, in the Mississippi Valley; $58, Alabama and $61 to $62 Georgia-Alabama area. Trading was chiefly for local account.

Linseed Meal—Fair demand prevailed for deferred deliveries of linseed meal, spot business confined to a few scattered cars for immediate needs. Mixers and jobbers booked moderate quantities for April delivery at $1 over spot. Deliveries against old contracts were active. Extracted meal, 34 percent protein, was held at $57 a ton, bulk, in carlots, f.o.b., Minneapolis, last-half March forward. Old process expeller meal was firm at $61.50 for March; $62.50, April-July.

Peanut Meal—Strength in other meals stiffened this market. Limited production was moved at $58.50 per ton, sacked for old process and $56 for solvent, f.o.b. Alabama-Georgia area.

Soybean Meal—Uncertainty prevailed in this market, several crushers withdrawing cash quotations while awaiting stability in futures, both soybeans and meal. Early gains were lost and unrestricted declined 50c. per ton. Declines in soybean oil checked declining meal, along with belief that severe shortage of soybeans will develop before new crop. Current production is about 75 percent of capacity. Meal, 44 percent protein, was held at $64.50 a ton, unrestricted, bulk, Decatur, for prompt delivery.

Waxes, Vegetables

Consuming demand continued limited to actual needs last week. While volume of business was restricted, the market remained steady at unchanged quotations. Carnauba grades were well held on spot, reflecting the firmness of replacements from Brazil. All grades were maintained at former levels. Refined beeswax also was firm and unchanged because of the scarcity and high cost of crude. Candellila was quiet but steady. Other varieties also were maintained at current quotations.

FDA Shuts Eyes to Additives Law Violations

—Continued from page 3

tension should be for a definite period of time or whether this should be left to the discretion of FDA on an individual product basis.

Also, there was some disagreement as to whether FDA has the authority to withhold application of the law from products which may be found at some future date to be additives and legally subject to the safety requirements of the law.

Rep. James Delaney of New York, leader of the factions supporting vigorous enforcement of the food additives law, expressed disappointment to the committee that an extension of the effective date had to be granted to avoid a chaotic situation developing in the food processing industry, but he thought a time limit should be placed on the extension.

He suggested two years as the cut-off date, stating that if at that time it is found that more time is needed then congress can act accordingly. He fears that unless a specific time limit is established, industry will "drag its feet."

He was supported in this contention by Rep. David S. King of Utah, another active participant in the food additives fights.

Ribicoff Sees 3 Years 'More Realistic'

Secretary of Health, Education Welfare Abraham Ribicoff testified briefly to support the FDA's extension bill. He said that a three-year extension appears to be a "more realistic approach," but if the committee feels that the extension should be limited to two years, he certainly has no objection.

However, Mr. Ribicoff favors the bill as it was originally written—without a time limit on the extension—because it included safeguards to prevent dilatory tactics.

Furthermore, he pointed out, the keystone to any extension that could be granted is the showing that the extension will present no undue hazard to public health.

"It is not contemplated that blanket extensions will be granted for a single period," he said. "Instead, the facts in each case must be taken into consideration.

"No more time should be authorized than is necessary to obtain the required data on this matter of safety for permanent usage of the particular item involved, whether it be a direct additive, or one which becomes a part of the food through migration of packaging or plant equipment components."

Only One Change in Bill

The only change in the bill, which the FDA endorsed outright, was a broadening of its terms so that an extension could be granted in the case of products for which an extension application was pending on March 6. This appeared to meet with accord all around as no objections were voiced from any quarter.

This amendment was specifically endorsed by the Manufacturing Chemists' Association in a letter to the committee and submitted for the record by Kenneth Mulford of Atlas Powder Company, Wilmington, Del., chairman of MCA's food additives committee.

The MCA letter, signed by John E. Hull, president, pointed out that without the amendment the bill would penalize manufacturers unjustly because FDA simply didn't have time to act on an application for extension that had been filed in good faith.

"The food additives amendment has resulted in a number of problems for the Food & Drug Administration and affected industries," Mr. Hull stated.

"Many manufacturers have diligently sought to learn whether their products were food additives as defined by the act. In many cases, it has only been with further refinement of analytical techniques that manufacturers were able to conclude that they did have food additives subject to the act."

Concur On Open-End Legislation

Mr. Mulford told the committee that the chemical industry agreed with FDA that the extension legislation should be of the open-end type, with FDA given authority to grant such time extensions as it considered necessary.

He recalled that the industry urged originally that the effective date of the food additives law be set five years ahead because of the tremendous testing job that faced both industry and the government, and added that if a cut-off date is to be provided in the extension bill, he favored fixing it at five years.

H. Edward Dunkelberger, counsel for the National Canners Association, suggested a six-months extension of the law to avoid any technical violations and to give FDA time to process applications for further extensions. FDA opposed such an extension as amounting to a blanket extension, which it did not feel to be in the public interest.

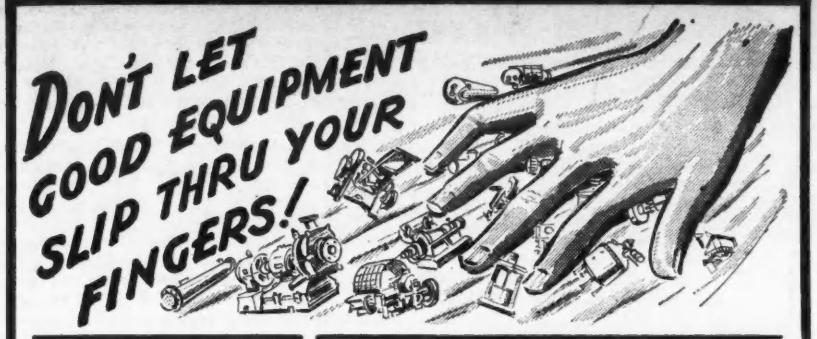
Michael Markel, chairman of the food and drug law committee of the American Bar Association, urged that HR 3980 be passed promptly with the amendment, offered by Mr. Larrick to extend its provisions to include petitions for extensions, and with a three-year time limit on the extensions.

Congress Erred on Date

During the discussion on the question of putting a time limit in the bill, the point was made by Rep. J. Arthur Younger of California that congress erred in fixing the effective date so early in the session as March 6.

He thought if any new expiration date is fixed it should be for some time later in the year—May 1 or June 1—to give returning congressmen more time to consider the problems involved. This was heartily endorsed by Mr. Larrick and other committee members

Another matter that aroused considerable interest among committee members was the question of how the law would operate in the case of a material not considered to be a food additive but which might be found later to be one.



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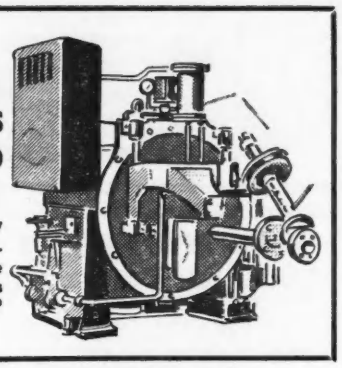

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FILTERS—FILTER PRESSES

4 Pressure Filters 30" x 56" Type 316 Stainless; 100 sq. ft.
Sparkler S/S Filter Model 14 S 4.
Sparkler Steel Filter Model 33 S 17.
S/S Nutsche Type Filter; 6' x 2'.
Bowser Filter with Pump; 2000 GPH.

OLIVER PRECOAT FILTERS

3" x 2" Monel. 5'3" x 8' Stainless.
(2) 5'3" x 3" Steel or Rubber.
Feinc S/S Rot. Vac. Filter 3' x 1'.
Oliver Cont. Rot. Vacuum Filters.
Panel Type; 8' x 8' and 8' x 10'.

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2—Allis Chalmers 7' x 22' (2 Compartment) Compeb Ball Mills with Meehanite Liners, driven by a magnetic-coupled 400 HP Motor.
1—Allis Chalmers 9½ x 810 Preliminator or Continuous Ball Mill; Meehanite Liners, driven by a magnetic-coupled 400 HP Motor.
3—Allis Chalmers 7' x 22' Continuous Ball Tube Mills, with Meehanite Liners, each driven by a magnetic-coupled 400 HP Motor, now operating in closed circuit with
3—Raymond 14 Ft. Double Whizzer Mechanical Air Separators, New in 1950, each driven by 75 HP Motor. May be purchased separately. Send for Prices and Details.

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2—Sharples C-20 and C-27 Super-D-Hydrator, 316 S.S.
1—Bird 18"x28", Solid Bowl, Continuous, 304 S.S.
2—Bird 24" x 38" Solid Bowl Continuous 304 SS.
1—Bird 32" x 50", Solid Bowl, Continuous, 316 S.S.
1—Bird 36" x 50" solid bowl continuous, 347 SS.
1—Bird 40" x 60" solid bowl continuous, 316 SS, UNUSED.
3—Sharples PY14, PN14 Super-D-Canters 316 S.S.
2—Fletcher 48" Suspended 316 S.S. Perforated Basket.
2—Sharples #16, 304 S.S., 3 HP motor.

REACTORS — EVAPS — CONDS — TANKS

1—150 gal. 304 S.S. jacketed agitated Reactor.
3—Pfaudler 200 gal. glass lined jacketed Kettles.
1—300 gal. Hastelloy B jacketed kettle.
1—650 gal. 304 S.S. Reactor with 100 sq. ft. Bayonet Heater.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—500 gal. S.S. Mixing Tank with nickel coils.
1—2,000 gal. horizontal 304 S.S. tank 5' x 12'.
1—2250 gal. 316 SS horizontal Tank, 6' x 9'6".
1—2,500 gal. vertical 304 SS Tank, 8' x 7'.
6—7500, 6000 and 2000 gal. Rubber Lined Tanks.
1—12,000 gal. horiz. steel Pressure Tank, 7'6"x36', 200 psi.
6—Stainless Heat Exchangers; 1220, 786, 536, 370, 315, 250 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.

FILTERS

1—#5 Sweetland Filter 304 S.S. 120 sq. ft.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Oliver 5' x 6' Steel Rotary Vacuum Precoat Filter.
1—U.S. 200 sq. ft. 304 S.S. Auto-Jet Filter.
1—Hercules 400 sq. ft. 304 SS pressure Filter.
1—Oliver 5'3"x8' Steel Rotary Vacuum, vaportite housing.
1—Feinc 5'x6' Stainless Steel Rotary Vacuum Filter.
1—Feinc 3' x 3' Stainless Steel Rotary Vacuum Filter.
2—#10 Sweetland Filters, 27 leaves, 4" centers, 250 sq. ft.
1—8200 gal. 321 SS vertical Tank, 10' x 14'.

DRYERS

1—Buflovak Vacuum Shelf with 20—60"x80" shelves.
2—Buflovak 42"x120", atmospheric double drum Dryers, complete.
1—Buflovak 32" x 90" Atmos. Twin Drum Dryer.
2—Devine 4'x9', single drum, atmospheric.
1—Buflovak 3'x10' Rotary Vacuum Dryer.
1—Baker Perkins 5'6"x6' Rotary Vacuum Dryer.
1—Buflovak 3' x 7'6" Rotary Vacuum Dryer 316 S.S.
6—Louisville Rotary Steam Tube 5'x25', 6'x30', 6'x50'.
2—Louisville 8'x50' Stainless Steel lined Rotary Dryers.
9—Rotary Dryers 34"x30', 4'x40', 6'x50', 6'x60', 7'x80', 8'x87'.
1—Traylor 30"x18' Stainless Steel Rotary Dryer.
2—Link Belt, 7'5"x25', 6'4"x24", S.S. Louvre Dryers.
2—Atmos. Tray Dryers, 16 shelves, 40"x24".
1—P&S 6' wide Apron Conveyor Dryer 48' long.

MIXERS

1—Farrel-Birmingham "Midget" Banbury Mixer.
2—Day Imperial 150 gal. jktd. double arm.
1—Baker Perkins 100 gal., jacketed, double arm, 30 HP.
1—Baker Perkins 50 gal. jacketed, double arm.
5—Day "Cincinnatus" double arm, 250 and 100 gal.
2—Steel jacketed Powder Mixers, 225 and 350 cu. ft.
1—Patterson 6' dia. Conical Blender 15 HP.
1—3' dia. Simpson Intensive Mixer.
1—45' dia. Lancaster Mixer, 7-1/2 HP motor.
1—Patterson Kelly 150 cu. ft. Twin Shell Blender.

MISCELLANEOUS

3—Kinney Vacuum Pumps, 750 cfm, 1 micron, 15 HP.
2—Hardinge 5' x 22" steel lined conical Ball Mills.
4—Mikro Pulverizers, #4TH, 1SH, 1SI and Bantam.
3—Abbe 2½' x 3' porcelain lined Pebble Mill XP motor.
1—Raymond 10" vert Mill, 10 HP.
1—No. 1 Ball & Jewell Rotary Cutter.
1—#18 Cumberland Rotary Cutter.
3—Swenson Walker Continuous Crystallizers, 24" x 30' sections.
2—#842 Rotex Sifters 60" x 84" double deck.
1—#24 Rotex Sifter, 20" x 64", Quadruple deck.

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1—ALLIS-CHALMERS 5' x 5' CONTIN. BALL MILL, 75 HP DRIVE.
1—NERCO-NIRO PORT. STAINLESS LAB. SPRAY DRYER.
1—FLETCHER 30" UNDERDRIVEN STAINLESS CENTRIFUGAL.
5—F. J. STOKES #138J-16 VACUUM SHELF DRYERS, 195 SQ. FT.
6—VALLEY 36" ALUMINUM P. & F. FILTER PRESSES, CLOSED DELIVERY, 65 CHAMBERS, HYDRAULIC CLOSURE, 1000 SQ. FT.
2—DAVENPORT #3A DEWATERING PRESSES.

KETTLES — REACTORS

1—1800 GAL. T316SS REACTOR, JKT. & AGIT., VACUUM.
3—1350 gal. T347SS Kettles, Jkt., paddle agit.
1—1000 gal. Dopp Kettle, cast iron, Jkt. & Agit.
1—750 GAL. T304SS KETTLE, JKT. & AGIT., ASME.
2—500 gal. T304SS Reactors, Jkt. ASME, UNUSED.
6—465 GAL. T304LSS REACTORS, 150# IWP, 165# JKT.
2—200 gal. T304SS Reactors, Jkt. & Agit.
2—125 gal. T316SS Kettles, shell Jkt.

DRYERS

5—F. J. Stokes #138J-16 vac. shelf dryers, 195 sq. ft., 16 shelves, 40" x 44".
5—BUFLOVAK 42" X 120" DRUM DRYERS, ASME 160#.
1—American 42" x 120" dbl. Drum dryer, ASME, stainless.
1—Buflovak 42" x 90" dbl. drum dryer.
1—AMERICAN 36" X 84" DBL. DRUM DRYER, ASME, VACUUM.
1—BUFLOVAK 5' X 12' SINGLE DRUM DRYER, VACUUM.
1—Buflovak 32" x 52" dbl. drum dryer, ASME 100# WP.
1—Buflovak 6" x 8" dbl. drum dryer, vacuum.
2—Buflovak Vacuum shelf dryers: 110, 98 sq. ft.
2—Hardinge 8'8" x 70' rotary dryers, ⅜" welded.
2—DAVENPORT 8' X 60' ROTARY DRYERS, 7/16" WELDED.
1—Louisville 4'6" x 25' rot. steam-tube dryer, welded.
1—Hardinge 4' x 30' rot. steam-tube dryer.
1—Bartlett 3' x 15' rotary dryer, everdur shell.

MIXERS

1—BAKER PERKINS #15, 100 GAL. DISP. BLADES, JKT., T347SS.
50—BAKER-PERKINS #17, 200 GAL. SIGMA JKTD. MIXERS.
1—Baker-Perkins #16, 150 gal. sigma jktd. mixer.
1—BAKER-PERKINS #15-UUMM, 100 GAL. DISPERSION MIXER, 100 HP, ASME JACKET, CORED BLADES, COMPRESSION COVER, MOTORIZED TILT.
1—J. H. Day #6 Cinc., 100 gal., sigma blades, Stainless.
2—Baker-Perkins #15, 100 gal., sigma jktd. mixer.
2—J. H. Day #5 Cinc., 75 gal., sigma blades.
1—J. H. Day #2 Cinc., 20 gal, jktd., sigma blades.
1—Marco continuous Roto-feed mixer, Stainless.
1—GEMCO 60 CU. FT. T304SS CONICAL BLENDER.

STAINLESS STEEL TANKS

1—5700 gal. horiz., T304 SS, 6'4" x 24', UNUSED.
1—4300 GAL. HORIZ. T304 SS, 6' x 20', DISHED HEADS, 50# WP.
1—3300 gal. vert., T304 SS, 6' x 14', dished heads.
1—3200 gal., vert., T304SS, 6'6" x 12', dished heads, coils.
1—3000 gal. vert., T304 SS, 6' x 15', coils, Vac.
3—2750 GAL. VERT., T316 SS, 7' x 8', DISHED HEADS, COILS.
2—2300 gal. vert., T316 SS, 7' x 8', coils, agit.
4—2250 GAL. VERT., T316 SS, 7' x 6'3", DISHED HEADS.
1—2100 gal. vert., T316 SS, 6' x 9'10", cone bottom.
12—1750 gal. vert., T304 SS hoppers, 235 cu. ft.
1—1600 gal horiz., T304 SS, 5' x 11', dished heads.
6—685 gal. vert., T316 SS, 3' x 13' coils.

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2—16,200 SQ. FT. QUAD. EFFECT EVAP., COPPER TUBES, CAST IRON BODIES,
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1—Buflovak 840 sq. ft. dbl. effect, T304 SS, size #7.5-42-D.
1—Buflovak 710 sq. ft., dbl. effect, T304 SS, size #7-35-D.
1—STRUTHERS-WELLS 630 SQ. FT. SINGLE EFFECT, T316 SS, CALANDRIA TYPE.
1—Buflovak 588 sq. ft. dbl. effect, T304 SS, size #6.5-29-D.
1—F. J. Stokes 118 sq. ft. single effect, T316 SS, U-tube still.
2—Rogers 6' dia. vacuum pans, T304 SS, int. coils.
1—1960 SQ. FT. T316 SS, HORIZ. EXCHANGER, ASME 75# WP.
1—1450 sq. ft. T316 SS vert. condenser, remov. bundle.
1—800 SQ. FT. T316 SS VERT. CONDENSERS, ⅝" OD TUBES.
1—730 sq. ft. T316 SS horiz. exchanger, remov. bundle.
6—691 SQ. FT. ANSONIA COPPER DOUBLE-PIPE COOLERS.
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4—T316 SS exchangers-condensers: 427, 425, 410, 400 sq. ft.
10—T316 SS exchangers: 290, 277, 264, 250, 200, 185, 165, 150, 145, 105 sq. ft.
8—T316 SS exchangers, 83, 73, 54, 52, 50, 47, 30 sq. ft.
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1—250 gal. S.S. Kettle, nickel jacket, 100#.
1—Patterson Steam Jkt. Ball Mill 42" x 36" dia.
2—Louisville Steam Tube Dryers 6' x 25'.
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1—#316 S.S. Reactor 265 gal. jkt.
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3500 gal. Vert. 8'x9'
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1200 gal. 5'x8' Agit
900 gal. 5'x5'
750 gal. 5'x5' Agit
500 gal. 3'6"x8' Agit
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300 gal. 4'x3' Cone bot
150 gal. 3'x3' Agit

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12000 gal. Horiz. 18'x23'
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3500 gal. 8'x9' w/coils
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1—Struthers Wells type 316 SS 2000 gal. jacketed reactor, complete with agitators and drive.

5—Pfaudler glass lined jacketed reactors, 30 to 300 gal., complete with agitators and drives.

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2—Louisville stainless steel rotary dryers, 8' x 50'.

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1—Williams "Comet" 4 roll mill, complete.

10—Robinson stainless steel double ribbon blenders, 125 cu. ft.

1—Stokes stainless steel rotary vacuum dryer, 3' x 15'.

5—Robinson stainless steel double ribbon horizontal blenders, 255 cu. ft.

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1—Baker Perkins SS double arm sigma blade mixer, 9 gal.

1—Baker Perkins Size 16 UUEM jacketed mixer, double arm dispersion type, complete with compression cover and 100 HP motor, 150 gal. capacity.

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Dryer: Bowen lab. spray, st. st.
Evaporator: Buflovak sgl. eff. st.st. 94 sq. ft.
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Filter: Sweetland #5 st. st. lined.
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5—Lee 300 gallon stainless steel jacketed kettles.
1—Baker Perkins 100 gallon jacketed double arm mixer.
4—Jacketed steel ball mills 2' x 3', 3' x 4', 4' x 5', 5' x 6'.
3—Rotex sifters 20" x 48", 40" x 84", 40" x 120".
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1—40" rubber lined suspended centrifuge, perforated basket.
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MIXERS—3 Qt. Read 316 S/S 2 Sigma New, 15 gal. 2 arm Bramley 5 HP vac/jack., 25 gal. 2 arm jack., 250 gal. unused Cowles Dissolver 10 HP xproof.

SCREENS—Single Ajax 12x74 S/S, Tyler 3'x5', Gyrocentric 28x27 & 36x36 S/S, Roball 40x84, double Rotex 20x96, 40x66, Tyler 3x5, triple Rotex 20x84.

HAMMERMILLS—5 HP Sturtevant 00—15 HP Mikro 2DH, 40 HP Jeffrey Rigid, 40 HP Gruendler, 50 HP Williams AKBX, 100 HP Wms. 30 NF.

PEBBLE MILLS—34x38, 36x36, 36x42, 42x36, 48x60, 54x42, 72x96, all with motor drives.

FEEDERS—Syntron F22, F44 S/S vibrating w/rectifiers, controls.

FILTER PRESSES — 7x7 (8pl) lead w/pump, 18x18 (24 p&f), 24x24 (32 p&f), 30x30 (10 p&f).

LAWLER COMPANY
LAWLER PLACE METUCHEN, N.J.
LIBERTY 9-0245

Business Wants and Offers

RATES PER INSERTION—PAYABLE IN ADVANCE (Not Subject to Agency Commission)

ALL CLASSIFIED ADVERTISEMENTS—$8.00, thirty-six words or less; $1.50 for each additional six words or fraction.

NO DISPLAY—First two words printed in bold face type.

COPY DEADLINE—Wednesday Noon Preceding Date of Publication

Send replies to ads with box numbers to
OIL, PAINT AND DRUG REPORTER, 30 *Church St., New York 7, N. Y.*

BUSINESS OPPORTUNITIES

Are you interested in European common market? Old established West German chemical and pigment producer owns large industrial tract on Rhine looking for American manufacturer with funds to match theirs in joint venture. OPD 206.

EQUIPMENT OFFERED

Tank—¼" steel—open top, dish bottom. 2" 150# flange outlet. 6½' x 6½', 1,600 gal. Two weeks old, never used. Ready for inside lining. Real cheap. Call MArket 3-7308, Newark, N. J.

For Sale: 5,780 sq. ft. Quadruple Effect Evaporator with cast iron bodies copper and monel tubes; four stainless steel Double Effect Evaporators, Blaw-Knox Co. (Buflovak) 608-703-840-1025 sq. ft. each; 5,000-1,000 gal. stainless Tanks; 3,000 and 900 gal. stainless Tanks with coils for full vacuum. Best Equipment Co., 1737 Howard St., Chicago 26, Illinois.

MATERIALS OFFERED

Phthalic Anhydride—150 bags—spot lot—domestic—sealed original. Plastolein 9058 D.O.Z. 2 x 55 gal. OPD 207.

MATERIALS WANTED

Sell Your contaminated chlorinated solvents. We pay highest prices for residue solvents from cleaning tanks, degreasers or other processes. Get our offer! Chemical Producers Service, Tenafly, N. J. LOwell 8-0511.

POSITIONS OFFERED

Product Manager . . . To Promote and Merchandise . . . Ethical Products Thru Drug Stores . . . Rare opportunity to set up and take complete charge of the introduction, promotion and merchandising of a universally known and accepted hospital product to the consumer through wholesale and retail drug outlets. Reply only if capable of self initiating this program and backed by heavy experience in this field. Send complete resume, including past and present salaries and minimum salary requirements in first letter to: OPD 209.

REPRESENTATION OFFERED

Leaving for six weeks July 15 for Italy, Switzerland, France and England. Have time and ability to represent your firm contacting, buying, selling. C. H Taylor, Prudential Bldg., #1102, Houston 25, Texas.

SERVICES OFFERED

Manufacturers' Rep—Successful chemical sales executive starting operation out of Los Angeles area for west coast area to handle chemicals and allied lines. Excellent references. OPD 208.

Do you ever buy Chemicals quietly? We do, confidentially, for undisclosed customers, one pound or a carload, domestic and foreign. Contact Chemicals International, Inc., Suite 1102 Prudential Bldg., Houston 25, Texas, JAckson 2-4141.

High Vacuum molecular distillation for large quantity runs on a toll basis. Separations without thermal hazard. Molecular Distillations, Inc., 527 Madison Avenue, New York 22, Tele: PLaza 3-6527

Cyanide and Plywood

—Continued from page 5

Society of Security Analysts heard last week from Georgia-Pacific's research and development vice-president, James L. Buckley.

Also talking to the analysts was president Robert B. Pamplin. Considering everything, including the new chemical venture, Mr. Pamplin said his company expects 1961 to be a "good year." The second half should be better than the first, he added.

1—Baker Perkins S.S., 2 arm. Jacketed, vacuum, hydraulic tilt—100 gal., 50 HP.

Stainless Steel Ball Mill.

2—AUTOCLAVES, jacketed, 5'x18', quick opening doors.

2—STORAGE TANKS — S.S. Clad, 11,000 gal.

1—S.S. Storage Tank, 5700 gal.

MACHINECRAFT CORP.
800 Wilson Avenue, Newark 5, New Jersey
Mitchell 2-7634

HERSEY 5' x 26'
ROTARY STAINLESS DRYER
DAY HY-R SPEED MILL
NEW 4000 Gal. STAINLESS TANK

CENTRIFUGALS—12" 30" 40" & 48". Amer. Tool 18' Stainless.
CENTRIFUGES—Sharples #5 & 6 S.S.
DRYERS—Hersey 5' x 26' Rotary Stainless
Buffalo 32" x 90" Double Drum Dryer
Buffalo Vac. Drum Dryer 24" x 20".
Despatch Ovens Elec. Heated.
3—Devine & Stokes Vac. Shelf Dryers.
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—#2 Sweetland 12 Stainless covered leaves.
Hercules Filter 36".
Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals.
Dopp 350 gal. Cast Iron Jack. Vacuum.
Devine Impreg. Units 30" & 36" dia.
Steel Alum & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000.
Mikro Pulverizer #4, 2S1, 2TH, 1SH.
Hammer Mills & Pulverizers 3 to 50 HP.
Williams #3 & #2XX Hammer Mills.
Taylor-Stiles 7½ HP Cutter.
Rotary Cutters 1 HP & up.
Sprt-Wald Stainless Spike Crusher.
Pebble, Jar & Ball Mills, Lab to 6' x 8'.
3 Roll, 9" x 24", 12" x 30", 16" x 40".
Lehmann 4 Roll W. C. 12" x 36" Steel.
MIXERS—Baker Perkins 100 gal. Jack.
B. P. 15 HP—Masticator Mixer.
Day Imperial 75 & 150 gal.
Change Can Mixers 8, 15, 40, 80 gal.
Day Jumbo 700 gal. horiz. Mixer.
Sprout-Waldron 10,000# horiz. Spiral Mixer.
Blystone 3000# horiz. spiral Mixer.
Day 1000# horiz. Dry ribbon Mixer.
Dry Spiral Mixers 50 to 10,000#.
Lancaster 4' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM.
Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson Rotex type.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Colton 4½ T.
Stokes R single punch & RDI rotary.
TANKS—Stainless, GL., Lined, Steel.
MISC. Boilers Gas & Oil. Conveyors.
Partial Listings — Write for Bulletins

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107 8th St., Brooklyn 15, New York
STerling 8-1944

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DORRCO CLARIFLOCCULATOR
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60' dia x 10' SWD Ser #10803. Complete with Westinghouse 3 HP Class III Gear Motor. Dorr Duplex Rubber lined Diaphragm Pump, heavy I beam supports and overload alarm. Very excellent condition.
TREMENDOUS SAVING
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123 Townsend St. - San Francisco 7, Calif.

"GEARED TO SERVE YOU"
Abbe Model 000 Rotary Cutter—1 HP
Stainless Alsop 6" Sealed Disc Filter
Raymond Laboratory Pulverizer—MD
Stainless Mikro Pulverizers—1SI & ISH
Atlantic automatic Wrap-around Labeler
Stainless 50# jacketed Ribbon Mixer—MD
Kent 20 gal. Super Pony Mixer 3 HP XP
Kent 13" x 32" Hi Speed 3 roll Mill—MD
Stainless Tanks 150-250-500 gallons
20-30-40-50-60-100-250 gal. Stainless Kettles
New Jersey Pony Labeler—Model 86 MX
We Buy or Trade — Send Us Your List
JASPER MACHINERY CO., INC.
282 SIXTH STREET BROOKLYN 15, N.Y
STerling 8-8308

CHOICE EQUIPMENT
2—Sparkler 14" & 8" Stainless Steel Filters.
5—Hercules 16" & 8" Square Stainless Steel Filters.
1—Homo Mixer 1 HP XP Motor.
1—Charlotte ND20—S.S. Colloid Mill—XP Motor.
4—Worthite S.S. Pumps—8" x 6"; 3" x 2"; 2½" x 2".
1—Stainless Steel 30 gal. Autoclave 1000 psi w/Jacket & Agitator w/XP Motor.
1—Cyclotherm Package Boiler 250 psi, 600# hr.—20 HP.
4—Stainless Vacuum Receivers 50 to 100 Gals. 250 psi.
1—Horiz. Closed Spiral Mixer, 3' x 12', Jack.
3—Spiral Blenders, 800 to 2000#.
1—Day Stainless Steel Blenders 2000#.
1—Patterson 5' x 6' Jack. Ball Mill, 25 HP.
1—Day 50 Gal. S.S. Sigma Blade Mixer.
1—N. J. MX Pony Labeler.
1—Resina Automatic Screw Capper, Model Spec.
5—Rotex Screens 20" x 38" to 60" x 84".
1—Kent High Speed 3 Roll Mill 13" x 32".
1—Devine Vac. Shelf Dryer, 10 shelves, 40" x 43".
1—Kent 20 Gal. Super Pony Mixer.
1—Mikro #3TH Pulverizer 15 HP.
1—Pfaudler 750 Gal. G.L. Reactor.
Send Us Your Inquiries.
We Buy Your Surplus.
THE MACHINERY & EQUIPMENT CO.
91-93 New Jersey R.R. Ave., Newark 5, N. J.
Market 2-3103

Trade Name Chemicals

—Continued from page 43

plications and as a flame retarder in plastics.

M&T offers "Thermoguard H" and "L," antimony oxide products for vinyl plastics. "Thermoguard H" is recommended for vinyl applications where high hiding power is desired, and "L" for uses where low power is acceptable.

The company points out that products have to be carefully standardized from batch to batch since development of consistant colors by the vinyl formulator depends, among other things, on use of uniform antimony oxide.

"M&T Flame Retarder" is offered by the company for use where extremely low tinctorial strength is an advantage as in the production of translucent films and where, for reasons of economy, less of the high-cost coloring pigments may be used in the formulation.

News Briefs

FEED SUPPLEMENTS: Merck Chemical Division, Rahway, N.J., has come out with a new technical service bulletin reporting results of a series of on-farm trials comparing "Pro-Strep" with other commonly-used feed antibiotics.

The penicillin-streptomycin feed mixture produced gains equal to the tetracycline groups in most tests, but at a saving of 0.1 to 0.2 pound of feed per pound of grain, Merck says.

PEROXIDES: Becco Chemical Division of Food Machinery & Chemical Corporation is making regular deliveries of hydrogen peroxide from a new midwest distribution center at Villa Park, Ill.

Becco will move the peroxide into the center in tankcar quantity from two main production plants in Buffalo, N.Y., and Vancouver, Wash., for redistribution by rail and truck in quantities and containers most suitable to individual customer requirements.

PLASTICIZERS: Rohm & Haas Company is marketing a monomeric epoxy ester, trade-named "Monoplex S-74," as a plasticizer-stabilizer for polyvinyl chloride compounds. The Philadelphia company reports the product was developed specifically to provide decreased volatility while maintaining good low temperature flexibility and ability to stabilize PVC against heat and light degradation.

PETROLEUM ADDITIVES PRICES: Enjay Chemical Company, New York, announces a 5 percent increase in prices for the company's line of petroleum additives, effective April 1.

Increased costs of manufacturing, technical service and new product development are cited as basis for the increase. Because of intensified research, the cost of using Enjay "Paramins" to improve the performance of many petroleum products has actually decreased during the past five years, the company says.

Cary Chemicals to Merge Great Bay, Regency Units

Great Bay Chemicals & Plastic, Inc., East Brunswick, N. J., will absorb Regency Plastics, Inc., according to an announcement by George Blasius, president of Cary Chemicals, Inc. Both companies are wholly-owned subsidiaries of Cary.

Great Bay, a producer of calendered vinyl sheeting, will take over the finishing operations of Regency and thus have a unified operation, doing its own printing, embossing and laminating.

Great Bay will absorb the present polyethylene extruding operations of Regency and print, emboss and laminate film used in the curtain, drapery, table cloth and packaging fields.

Publicker May Substitute

—Continued from page 5

one-third of the support price of $1.06 a bushel.

This would bring the price of the corn down to the point where it could be converted into alcohol in competition with other alcohols.

Mr. Freeman has disclosed he intends to raise the corn support price to $1.20 a bushel. Legislation to tie in the higher supports with tighter controls over corn production is now moving through congress.

A bill to this end was reported last week by the house agriculture committee and is scheduled to be acted upon this week in the house.

Montrose Directors Okay

—Continued from page 4

would be known as Baldwin-Montrose Chemical Company.

Montrose produces DDT and other chemicals at Newark, N. J. Baldwin, located at Pontiac, Mich., turn out plastic film and rubber products. Centliver, with headquarters at Forth Wayne, Ind., brews beer.

ECH SPECIALS
Blaw Knox SS 100 gal. Autocl. Agtd. 1000 PSI.
Patterson SS 5 cu. ft. Twin Blender, 3 HP.
Fractionating Column 316 SS, 2½'x22'.
Oliver 316 SS Filter 6' dia., 25 sq. ft. cap.
Pfaudler 1500 gal. Glass Tank; closed top.
Simpson 18" Lab. Mix Muller with ¾ mtr.
Abbe 5'x6' Jktd. Ball Mill, chr. mang. steel.
Cavagnaro sig. arm 200 gal. SS Mixer, 75 hp.
2—SS Fitz Mills model D, w/5 HP mtr.
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P.A.'s Call Business Mood Listless

—Continued from page 4

upward pressures have appeared on the charts since November, 1960, reversing the down trend prevailing from November, 1959. For February, 9 percent report increases, compared to 12 percent in January and 6 percent in December. Those reporting lower prices totalled 11 percent, compared to 10 percent in January and 14 percent in December. Purchasing executives report that competition is very keen and buyer resistance to price increases is high, as management looks to purchasing more and more for cost reduction.

Purchased Materials Inventories

Inventory reduction continues at the rate noted in December, reversing the temporary slowdown reported in January: 36 percent report further reduction, as compared to 31 percent last month; and, only 13 percent report increases, as compared to 18 percent in January. Reporting no change were 51 percent. Comments indicate great pressure to avoid carrying costs by keeping inventories at the lowest possible working levels.

Employment

Employment continues to be the dark cloud hovering over the economy. The downward trend since March, 1960, continues this month, with the rate greater than last month: 42 percent report a worsened employment situation, compared to 36 percent in January and 30 percent in December. Only 6 percent report improvement, down from 7 percent in January. This is the smallest percentage reporting increases since January, 1958, and the largest percentage reporting fewer employees since April, 1958. Our members indicate little hope for improvement before spring.

Buying Policy

Purchasing executives continue to show great caution in their willingness to make forward commitments. The figures this month are about the same as last, which indicated some slight lengthening over December. The fact that 68 percent say they are committing for their production materials on a sixty-day or less basis is evidence enough of the short-term buying policy that prevails. In the case of M.R.O. items, 79 percent are buying on a thirty-day or less basis, and this rises to 96 percent when you look at sixty days or less. Only on capital items does forward buying extend beyond sixty days and even then only 39 percent are six months or over. While some very slight lengthening is hinted, tight inventory control is again indicated here.

	Percent Reporting				
	Hand to Mouth	30 Days	60 Days	90 Days	6 Mos. to 1 Yr.
February					
Production materials	12	39	37	9	3
MRO supplies.....	31	48	17	4	0
Capital expenditures	17	8	11	25	39
January					
Production materials	10	39	23	14	3
MRO supplies.....	32	47	15	4	3
Capital expenditures	16	9	13	22	40

Specific Commodity Changes

As usual, for this category, both ups and downs are reported over a wide range of commodities. Most, however, fail to receive much support and may reflect local situations. Of those items most frequently mentioned, the larger number lean toward the up side. Shortages are reported to be almost nonexistent.

On the up side are: Steel scrap, corn starch, vegetable oils, fuel oil, jute, manila hemp, burlap, electric motors, fatty acids and paint.

On the down side are: Copper, warehouse steel, zinc, and miscellaneous electrical equipment.

In short supply: Phthalic anhydride and esters.

Imports at U. S. Ports

—Continued from page 48

PEPPER, RED—300 bgs, Hismoco American Co, Yokohama
100 bgs, Louis Furth, Yokohama
100 bgs, C M Van Sillevoldt, Yokohama
100 bgs, Pacific Trading Co, Yokohama
100 bgs, California Commodities Corp, Yokohama
200 bgs, M J Golombeck, Yokohama
100 bgs, Catz American Co, Yokohama
PEPPER, WHITE—100 bgs, M J Golombeck, Belem
200 bgs, Mincing Trading Corp, Belem
100 bgs, A G Dunn, Belem
70 bgs, J H Elton, Singapore
140 bgs, Atlanta Textile Corp, Singapore
420 bgs, Singapore
PETIT GRAIN OIL—19 dms, Hollander Trading Corp, Asuncion
12 dms, Polarome Manufacturing Co, Asuncion
18 dms, J M Rodriguez, Asuncion
6 dms, Swiss Credit Bank, Asuncion
39 dms, Asuncion
4-PICOLINE—2 dms, Van Oppen & Co, Liverpool
PIGMENT, GREEN—5 dms, Chemical Bank, London
POLLACKLIVER OIL—20 dms, Peder Devold Oil Co, Yokohama
POLYVINYL ALCOHOL—500 bgs, Kobe
POLYVINYL CHLORIDE RESIN—600 bgs, H Bedos & Co, Yokohama
POPPYSEED—300 bgs, Rotterdam
POTASSIUM CHLORIDE—67 bgs, Bremerhaven
POTASSIUM CYANIDE—100 dms, Chemical Manufacturing Co, Liverpool
POTASSIUM FERRICYANIDE—200 bbls, Atlantic Raw Materials, Hamburg
POTASSIUM METABISULFITE—4 cs, A Gusmer, Liverpool
POTASSIUM NITRATE—600 bgs, Philipp Bros Chemicals, Trieste
290 bgs, Tar Residuals Inc, Trieste
POTATO STARCH—100 bgs, Richter Bros, Rotterdam
PSYLLIUM SEED—130 bgs, Meer Corp, Bombay
QUEBRACHO EXTRACT—5.566 bgs, American Tanners Ltd, Buenos Aires
2,665 bgs, Barkey Importing Co, Buenos Aires
QUINIDINE SULFATE—3 cs, Frank Samuel & Co, Southampton
2 kgs, Frank Samuel & Co, Southampton
ROSEMARY OIL—6 dms, Yardley of London, Barcelona
SACCHARIN—66 dms, Yokohama
SAGE LEAVES—250 bls, K H Werthon, Trieste
SAGE OIL—2 dms, L A Champon & Co, Barcelona
SANDALWOOD OIL—6 cs, George Uhe Co, Calcutta
9 cs, Fleuroma Inc, Cochin
1 cs, Cochin
SAPONIN—10 dms, Karr Ellis, Liverpool
SEEDLAC—750 bgs, United Shellac Corp, Calcutta
500 bgs, Wm Zinsser & Co, Calcutta
250 bgs, Capitol Shellac Corp, Bangkok
200 bgs, Mantrose Corp, Calcutta
250 bgs, Colony Import & Export Corp, Bangkok
250 bgs, Parks Co, Bangkok
350 bgs, Calcutta
SENEGA ROOT—20 bls, Meer Corp, Kobe
SESAME SEED—100 bgs, G La Rosa & Son, Corinto
400 bgs, J Bieler, Corinto
895 bgs, Levy & Levis Co, Corinto
1,101 bgs, M J Golombeck, Corinto
300 bgs, J M Rodriguez, Corinto
370 bgs, A Sahadi & Co, Corinto
200 bgs, A A Sayia, Corinto
200 bgs, Ideal Trading Co, Corinto
200 bgs, I Fenster, Corinto
2,668 bgs, Independent Halvah & Candies, Corinto
25 bgs, Nieman Bros, Corinto
2,000 bgs, Independent Halvah & Candies, Puerto Barrios
560 bgs, A Sahadi & Co, Puerto Barrios
SESAME SEED, HULLED—200 bgs, Hismoco American Co, Corinto
600 bgs, Nieman Bros, Corinto
600 bgs, Archibald & Kendall, Corinto
400 bgs, Levy & Levis Co, Corinto
200 bgs, V A Cordovi, San Juan del Sur
50 bgs, McLaughlin Gormley King Co, San Juan del Sur
900 bgs, A A Sayia, Corinto
100 bgs, H H Perker, Corinto
500 bgs, Louis Furth, Corinto
SHELLAC—350 bgs, Mantrose Corp, Calcutta
678 bgs, Wm Zinsser & Co, Calcutta
850 bgs, Calcutta
SOAP BARK—438 bls, S B Penick & Co, San Antonio
SODA, CAUSTIC—180 dms, B T Chemco Inc, Gothenburg
SODIUM CYCLAMATE—66 dms, Olin Mathiesen Chemical Corp, Kobe
SODIUM SILICOFLUORIDE—550 bgs, Copenhagen
STEARIC ACID—25 bgs, Orbis Products Corp, Liverpool
STEATITE—120 bgs, M Kirchberger & Co, Madras
SULFANILAMIDE—70 cks, London
TALC—15,000 bgs, Charles Mathieu, Genoa
TAPIOCA FLOUR—602 bgs, Geismar & Co, Kohsichang
336 bgs, Poons Co, Kohsichang
10,241 bgs, Morningstar Paisley Inc, Kohsichang
1,000 bgs, Connell Rice & Sugar Co, Kohsichang
3,808 bgs, Stein Hall & Co, Kohsichang
TARA POWDER—144 bgs, National City Bank, Salaverry
TARTARIC ACID—450 bgs, Nylos Trading Co, Genoa
175 bgs, Frank Samuel & Co, Marseille
THIONYL CHLORIDE—1 ck, Naftone Inc, Hamburg
TOLU BALSAM—25 cs, Barranquilla
VANILLA BEANS—10 cs, F Huber & Co, Marseille
12 cs, Far Eastern Commodity Corp, Marseille
71 cs, Djibouti
VETIVER OIL—2 dms, Roure-Dupont Inc, Port Au Prince
VIOMYCIN SULFATE—7 cs, Ciba Pharmaceutical Products, London
WAX—1,189 bgs, Hostawax Co, Bremerhaven
WAX EMULSIFIER—45 dms, Hostawax Co, Bremerhaven
YLANG YLANG OIL—4 kgs, Cannes
ZINC OXIDE—600 bgs, Liverpool
480 bgs, London
ZINC WHITE—200 bgs, Revelli Chemical Co, Antwerp
ZINC YELLOW—200 bgs, Revelli Chemical Co, Antwerp

Los Angeles

AMMONIUM BICARBONATE—100 dms, Chemical Manufacturing Co, Liverpool
COPRA—750 tons, Procter & Gamble Co, Jagna
EARTH COLORS—220 bgs, H Hartry, London
FE[illegible]—60 bgs, Hismoco American Co, Rotterdam
GINGER—57 bgs, Hismoco American Co, Curacao
GYPSUM—120 bgs, Hammill & Gillespie, Liverpool
GYPSUM, CRUDE—17,349 tons, Kaiser Gypsum Co, San Marcos
IRON OXIDE—424 bgs, F D Davis Co, Liverpool
1,885 bgs, F D Davis Co, London
MOLASSES—3,188 tons, Pacific Molasses Co, Topolobampo
PEPPER, RED—100 bgs, Unico Enterprises, Yokohama
300 bgs, Yokohama
300 bgs, Kobe
PETROLEUM, CRUDE—282,871 bbls, Richfield Oil Corp, Punta Cardon
POPPYSEED—100 bgs, R J Spitz, Rotterdam
100 bgs, B C Ireland, Rotterdam
QUEBRACHO EXTRACT—532 bgs, Barkey Importing Co, Buenos Aires
SESAME SEED—500 bgs, H M Newhall & Co, Corinto
100 bgs, Hismoco American Co, Corinto
a-TACOPHERYL ACETATE—12 cs, J London, Antwerp
ZINC OXIDE—672 bgs, F D Davis Co, London
460 bgs, London

Philadelphia

ADIPIC ACID—500 bgs, Rotterdam
AMMONIUM CHLORIDE—400 bgs, Liverpool
ASBESTOS FIBER—720 bgs, Chas Kurz & Co, Lourenco Marques
600 bgs, Davies Turner Co, Capetown
BONE—2,790 bgs, Buenos Aires
CALCIUM CARBONATE—4,860 bgs, Pluess Stauffer, Antwerp
2,400 bgs, Whittaker Clark & Daniels, Liverpool
1,200 bgs, Antwerp
CASEIN—600 bgs, National Casein Co, Melbourne
300 bgs, Melbourne
CHESTNUT EXTRACT—340 bgs, Barkey Importing Co, Naples
1,100 bgs, Barkey Importing Co, Genoa
GLANDS, PANCREAS—123 cs, Vera Cruz
GLYCERINE—100 tons, International Packers Ltd, Buenos Aires
564 dms, Sydney
GRAPHITE—1,033 bgs, Asbury Graphite Mills, Tamatave
GYPSUM, CRUDE—10,803 tons, National Gypsum Co, Halifax
HEXANOL—120 dms, Hamburg
MAGNESITE—994 tons, Split
MAGNESIUM OXIDE—380 cs, Keer Mauer, Liverpool
MELAMINE—400 bgs, Yokohama
MENTHOL—604 cs, Vicks Chemical Co, Santos
NAPHTHA—174,618 bbls, Texaco Co, Trinidad
OLIVE OIL—65 dms, Seville
OSSEINE—833 bgs, Antwerp
PERCHLOROETHYLENE—100 dms, International Selling Corp, Marseille
POTASH, MURIATE—1,919 tons, French Potash & Import Co, Antwerp
POTASSIUM NITRATE—330 bgs, Bremen
QUEBRACHO EXTRACT—400 bgs, Tanimex Corp, Buenos Aires
RUTILE SAND—20,000 bgs, Frank Samuel & Co, Brisbane
1,000 bgs, Brisbane
SHELLAC—200 bgs, Mantrose Corp, Bremen
SODIUM BICARBONATE—1,000 bgs, Chemical Manufacturing Co, Liverpool
TAPIOCA FLOUR—1,949 bgs, Poons Co, Kohsichang
1,000 bgs, First National Boston, Kohsichang
645 bgs, Brown Bros, Kohsichang
1,000 bgs, First National Boston, Bangkok
UREA—600 bgs, Rotterdam
UREA, SYNTHETIC—647 bgs, Chemical Manufacturing Co, Liverpool
VANILLA BEANS—72 cs, Camax Co, Vera Cruz
10 cs, Cristobal
496 cs, Tamatave
XYLENOL—100 dms, Concord Chemical Co, Manchester
ZIRCON SAND—5,000 bgs, Frank Samuel & Co, Brisbane
4,473 bgs, Sydney

San Francisco

ALUMINUM OXIDE—188 bgs, Ceraplast Inc, Rotterdam
ARROWROOT—400 bgs, Morningstar Paisley Inc, Port of Spain
BONEMEAL—831 tons, Stauffer Chemical Co, Buenos Aires
CALCIUM NITRATE—54,133 bgs, Wilson & Geo Meyer & Co, Heroya
CASEIN—700 bgs, E Lang, Buenos Aires
COPRA—800 tons, Cargill Inc, Zamboanga
800 tons, Cargill Inc, Dumaguete
150 tons, Cargill Inc, Cebu
FISHMEAL—4,348 bgs, Marine Midland Trust Co, Chimbote
4,348 bgs, Marine & Animal By Products Corp, Callao
18,327 bgs, Albumina Supply Co, Callao
2,205 bgs, Marine & Animal By-Products Corp, Arnica
4,370 bgs, Wilbur Ellis Co, Arica
32,958 bgs, Chimbote
2,174 bgs, Callao
FUEL OIL—119,966 bbls, Standard Oil Co, Curacao
MONOSODIUM GLUTAMATE—140 cs, Ajinomoto Co, Yokohama
NUTMEG—30 bgs, Port of Spain
PEPPER, BLACK—160 bgs, Mincing Trading Corp, Cochin
240 bgs, Alleppey
PEPPER, RED—100 bgs, H M Newhall & Co, Kobe
QUEBRACHO EXTRACT—310 bgs, International Products Corp, Buenos Aires
TAPIOCA FLOUR—896 bgs, Morningstar Paisley Inc, Bangkok
896 bgs, H. M. Newhall & Co, Bangkok
1,317 bgs, Morningstar Paisley Inc, Kohsichang
198 bgs, H M Newhall & Co, Kohsichang

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